

THREE RIVERS COLLEGE

Office of Institutional Effectiveness



**Student Learning Outcomes
Assessment Reports**

2023-2024

Student Learning Outcomes Assessment Reports

Three Rivers College Program Managers prepare annual Student Learning Outcomes assessment reports that evaluate student learning and progress of students within their respective programs. These assessment reports are created to document and communicate program-specific learning results within a framework of outcomes and measures determined by the faculty. Program faculty, Department Chairs, the Chief Academic Officer, the Office of Institutional Effectiveness, and the Student Learning Improvement Committee (SLIC) participate in the review of these reports. Following each review, SLIC and academic leadership provide feedback to the Program Manager to support continuous improvement.

The following programs submitted formal reports for the 2023-2024 academic year:

- [Accounting Technology AAS](#)
- [Agribusiness AAS](#)
- [Agriculture Systems Technician AAS](#)
- [Behavioral Health Support AAS](#)
- [Criminal Justice AAS](#)
- [Early Childhood Development AAS](#)
- [Education AAT](#)
- [Information Technology Specialist AAS](#)
- [Manufacturing Technology AAS](#)
- [Nursing AAS](#)
- [Paramedic AAS](#)
- [Practical Nursing One Year Certificate](#)
- [Welding Technology AAS](#)



THREE RIVERS COLLEGE

**Accounting Technology AAS
Program Level SLO Report
Jennifer Inman– Program Manager**

2023-2024

Program Purpose Statement

The Accounting Technology Program is designed for students planning a career that requires expertise in accounting, information systems, and/or communication. Possible areas of employment include healthcare, banking, manufacturing, merchandising, and public accounting.

Program Outcomes

1. Perform financial accounting and management functions using report format and procedures.
2. Communicate business information effectively within a business environment.
3. Demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.
4. Utilize current income tax resources to prepare personal tax returns.
5. Use technology to solve complex business issues, report, and display these solutions in an appropriate manner.
6. Demonstrate knowledge of accounting as it relates to payroll.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Accounting Technology: Program Outcomes Mapping

Program Outcome 1:	
Perform financial accounting and management functions using report format and procedures.	
Course	Course Learning Outcome (CLO)
ACCT 211: Principles of Accounting I	Apply GAAP for corporate financial reporting.
	Analyze the elements of internal control.
	Demonstrate accounting procedures for corporate bonds.
	Calculate financial ratios and use them to evaluate business performance.
ACCT 212: Principles of Accounting II	Construct a statement of cash flows using information from the accrual balance sheet and income statement.
	Analyze corporate financial statements.
	Demonstrate job order and process costing procedures and budget preparation.
	Relate the use of accounting information to pricing and capital investment decision making.
ACCT 218: Payroll Accounting	Compute gross earnings.
	Compute the amount of federal income tax withholding.
	Calculate FICA taxes, nontax payroll deductions, and unemployment taxes.
	Record employees' wages in payroll register by payroll period.
	Prepare employees' earnings record.
	Prepare payroll tax reports.
	Explain payroll deposit requirements.

	Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities.
ACCT 219: Accounting Management Software	Develop the skills necessary to complete general ledger computer accounting for service and merchandising businesses.
	Complete exercises involving accounts receivable, accounts payable, inventory and payroll.
	Prepare financial statements and complete financial statement analysis.
	Complete the accounting cycle using QuickBooks and Microsoft Office software.
	Integrate QuickBooks with Microsoft Office applications.
	Develop an understanding of service and merchandising computer accounting.
ACCT 225: Intermediate Accounting I	Identify underlying concepts and basic procedures of a financial accounting information system and financial statement analysis.
	Communicate orally and in writing financial accounting information.
	Demonstrate the recording and processing of more complex transactions and events.
	Manage information accumulation, processing, recording, and reporting steps.
	Identify, measure, and report an entity's assets and determine related impact upon income determination.
ACCT 227: Financial Analysis & Budgeting	Develop an understanding of the budgeting process and complete a master budget for a manufacturer and a merchandiser.
	Prepare financial statements for various types of companies.
	Calculate and interpret measures of liquidity, solvency and profitability.
ACCT 258: Cost Accounting	Evaluate the costs of materials, labor and overhead.
	Apply the costs of production to the process cost system.
	Prepare a master and flexible budget.
	Analyze the costs of the business for managerial decisions.
BLAW 221: Legal and Ethical Environment of Business	Identify the sources of law and the legal system within the United States.
	Discuss the elements of a contract and the rights and obligations within.
	Distinguish when the law of contract and the law of sales are to be applied.
	Explain torts and the type of remedies available for breach of agreements.
	Explain the elements of intellectual property and maintaining ownership interests.
	Analyze business regulations for their moral and ethical value and determine how they impact the business environment.
IST 268: Spreadsheet Applications	Interpret financial data.
	Design formulas that solve math problems.
	Show data in a meaningful way using charts, graphs, macros, and pivot tables.
	Integrate Excel spreadsheets with other software applications and the Internet.

Program Outcome 2:

Communicate business information effectively within a business environment.

Course	Course Learning Outcome (CLO)
ACCT 211: Principles of Accounting I	Identify the role of the accounting profession in ethical business decision-making.
ACCT 212: Principles of Accounting II	Construct a statement of cash flows using information from the accrual balance sheet and income statement.
	Demonstrate job order and process costing procedures and budget preparation.
	Relate the use of accounting information to pricing and capital investment decision making.
ACCT 218: Payroll Accounting	Describe and discuss employment and payroll laws.
	Compute gross earnings.
	Compute the amount of federal income tax withholding.
	Calculate FICA taxes, nontax payroll deductions, and unemployment taxes.
	Record employees' wages in payroll register by payroll period.
	Prepare employees' earnings record.
	Prepare payroll tax reports.
	Explain payroll deposit requirements.
ACCT 219: Accounting Management Software	Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities.
	Develop the skills necessary to complete general ledger computer accounting for service and merchandising businesses.
	Complete exercises involving accounts receivable, accounts payable, inventory and payroll.
	Prepare financial statements and complete financial statement analysis.
	Complete the accounting cycle using QuickBooks and Microsoft Office software.
	Integrate QuickBooks with Microsoft Office applications.
ACCT 225: Intermediate Accounting I	Develop an understanding of service and merchandising computer accounting.
	Identify underlying concepts and basic procedures of a financial accounting information system and financial statement analysis.
	Communicate orally and in writing financial accounting information.
	Demonstrate the recording and processing of more complex transactions and events.
	Manage information accumulation, processing, recording, and reporting steps.
ACCT 227: Financial Analysis & Budgeting	Identify, measure, and report an entity's assets and determine related impact upon income determination.
	Develop an understanding of the budgeting process and complete a master budget for a manufacturer and a merchandiser.
	Prepare financial statements for various types of companies.
	Calculate and interpret measures of liquidity, solvency and profitability.
	Apply the costs of production to the process cost system.

ACCT 258: Cost Accounting	Prepare a master and flexible budget.
	Analyze the costs of the business for managerial decisions.
BLAW 221: Legal and Ethical Environment of Business	Identify the sources of law and the legal system within the United States.
	Discuss the elements of a contract and the rights and obligations within.
	Distinguish when the law of contract and the law of sales are to be applied.
	Explain torts and the type of remedies available for breach of agreements.
	Explain the elements of intellectual property and maintaining ownership interests.
BUED 203: Business Communication	Analyze business regulations for their moral and ethical value and determine how they impact the business environment.
	Demonstrate their abilities to use clear, concise, and grammatically correct language.
	Practice the ability to select, organize, and effectively deliver information in a businesslike manner.
IST 100: Computer Application	Demonstrate ability to contribute to team performance, plan and participate in productive meetings, and use collaborative technologies.
	Demonstrate proficiency in using word processing software.
	Demonstrate proficiency in using spreadsheet software.
	Demonstrate proficiency in using database software.
IST 268: Spreadsheet Applications	Demonstrate proficiency in using presentation software.
	Design formulas that solve math problems.
	Show data in a meaningful way using charts, graphs, macros, and pivot tables.
	Integrate Excel spreadsheets with other software applications and the Internet.

Program Outcome 3:

Demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.

Course	Course Learning Outcome (CLO)
ACCT 211: Principles of Accounting I	Apply GAAP for corporate financial reporting.
	Analyze the elements of internal control.
	Demonstrate accounting procedures for corporate bonds.
	Calculate financial ratios and use them to evaluate business performance.
ACCT 212: Principles of Accounting II	Analyze corporate financial statements.
	Demonstrate job order and process costing procedures and budget preparation.
ACCT 218: Payroll Accounting	Describe and discuss employment and payroll laws.
	Compute gross earnings.
	Compute the amount of federal income tax withholding.
	Calculate FICA taxes, nontax payroll deductions, and unemployment taxes.
	Record employees' wages in payroll register by payroll period.
	Prepare employees' earnings record.

	Prepare payroll tax reports.
	Explain payroll deposit requirements.
	Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities.
ACCT 219: Accounting Management Software	Develop the skills necessary to complete general ledger computer accounting for service and merchandising businesses.
	Complete exercises involving accounts receivable, accounts payable, inventory and payroll.
	Prepare financial statements and complete financial statement analysis.
	Complete the accounting cycle using QuickBooks and Microsoft Office software.
	Integrate QuickBooks with Microsoft Office applications.
	Develop an understanding of service and merchandising computer accounting.
ACCT 225: Intermediate Accounting I	Identify underlying concepts and basic procedures of a financial accounting information system and financial statement analysis.
	Communicate orally and in writing financial accounting information.
	Demonstrate the recording and processing of more complex transactions and events.
	Manage information accumulation, processing, recording, and reporting steps.
	Identify, measure, and report an entity's assets and determine related impact upon income determination.
ACCT 227: Financial Analysis & Budgeting	Develop an understanding of the budgeting process and complete a master budget for a manufacturer and a merchandiser.
	Prepare financial statements for various types of companies.
	Calculate and interpret measures of liquidity, solvency and profitability.
ACCT 237: Income Tax Accounting	Describe the history and theory of federal income taxes in the United States.
	Calculate an individual's tax payment or refund using Form 1040, 1040A.
	Propose a plan for individual's taxes in future years.
ACCT 258: Cost Accounting	Evaluate the costs of materials, labor and overhead.
	Apply the costs of production to the process cost system.
	Prepare a master and flexible budget.
	Analyze the costs of the business for managerial decisions.
BLAW 221: Legal and Ethical Environment of Business	Discuss the elements of a contract and the rights and obligations within.
	Distinguish when the law of contract and the law of sales are to be applied.
	Explain torts and the type of remedies available for breach of agreements.
	Explain the elements of intellectual property and maintaining ownership interests.

Program Outcome 4:

Utilize current income tax resources to prepare personal tax returns.

Course	Course Learning Outcome (CLO)
ACCT 237: Income Tax Accounting	Describe the history and theory of federal income taxes in the United States.
	Calculate an individual's tax payment or refund using Form 1040, 1040A.
	Propose a plan for individual's taxes in future years.

Program Outcome 5:	
Use technology to solve complex business issues, report, and display these solutions in an appropriate manner.	
Course	Course Learning Outcome (CLO)
ACCT 211: Principles of Accounting I	Calculate financial ratios and use them to evaluate business performance.
ACCT 212: Principles of Accounting II	Analyze corporate financial statements.
ACCT 218: Payroll Accounting	Compute gross earnings.
	Compute the amount of federal income tax withholding.
	Calculate FICA taxes, nontax payroll deductions, and unemployment taxes.
	Record employees' wages in payroll register by payroll period.
	Prepare employees' earnings record.
	Prepare payroll tax reports.
	Explain payroll deposit requirements.
	Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities.
	Demonstrate proficiency in using a 10-key calculator.
ACCT 219: Accounting Management Software	Develop the skills necessary to complete general ledger computer accounting for service and merchandising businesses.
	Complete exercises involving accounts receivable, accounts payable, inventory and payroll.
	Prepare financial statements and complete financial statement analysis.
	Complete the accounting cycle using QuickBooks and Microsoft Office software.
	Integrate QuickBooks with Microsoft Office applications.
	Develop an understanding of service and merchandising computer accounting.
ACCT 225: Intermediate Accounting I	Identify underlying concepts and basic procedures of a financial accounting information system and financial statement analysis.
	Communicate orally and in writing financial accounting information.
	Demonstrate the recording and processing of more complex transactions and events.
	Manage information accumulation, processing, recording, and reporting steps.
	Identify, measure, and report an entity's assets and determine related impact upon income determination.
ACCT 227: Financial Analysis & Budgeting	Develop an understanding of the budgeting process and complete a master budget for a manufacturer and a merchandiser.
	Prepare financial statements for various types of companies.
	Calculate and interpret measures of liquidity, solvency and profitability.
ACCT 237: Income Tax Accounting	Calculate an individual's tax payment or refund using Form 1040, 1040A.
	Propose a plan for individual's taxes in future years.

ACCT 258: Cost Accounting	Prepare a master and flexible budget.
	Analyze the costs of the business for managerial decisions.
BLAW 221: Legal and Ethical Environment of Business	Identify the sources of law and the legal system within the United States.
	Discuss the elements of a contract and the rights and obligations within.
	Distinguish when the law of contract and the law of sales are to be applied.
	Explain torts and the type of remedies available for breach of agreements.
	Explain the elements of intellectual property and maintaining ownership interests.
	Analyze business regulations for their moral and ethical value and determine how they impact the business environment.
IST 100: Computer Application	Demonstrate proficiency in using college systems to conduct online learning and research.
	Demonstrate understanding of security options for technology platforms.
	Demonstrate proficiency in operating a personal computer.
	Demonstrate proficiency in using word processing software.
	Demonstrate proficiency in using spreadsheet software.
	Demonstrate proficiency in using database software.
	Demonstrate proficiency in using presentation software
IST 268: Spreadsheet Applications	Interpret financial data.
	Design formulas that solve math problems.
	Show data in a meaningful way using charts, graphs, macros, and pivot tables.
	Integrate Excel spreadsheets with other software applications and the Internet.

Program Outcome 6:

Demonstrate knowledge of accounting as it relates to payroll.

Course	Course Learning Outcome (CLO)
ACCT 218: Payroll Accounting	Describe and discuss employment and payroll laws.
	Compute gross earnings.
	Compute the amount of federal income tax withholding.
	Calculate FICA taxes, nontax payroll deductions, and unemployment taxes.
	Record employees' wages in payroll register by payroll period.
	Prepare employees' earnings record.
	Prepare payroll tax reports.
	Explain payroll deposit requirements.
	Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities

Introduction

The program outcomes for the AAS in Accounting Technology reflect what an accounting professional entering the workforce should know and tasks they should be able to complete.

The data analyzed came from student work collected during the 2023-2024 academic year.

Artifacts used to measure the outcomes came from the following courses:

- ACCT 218, Payroll Accounting
- ACCT 219, Accounting Management Software
- ACCT 225, Intermediate Accounting
- ACCT 227, Financial Analysis and Budgeting
- ACCT 237, Income Tax Accounting

Various assessment artifacts were used throughout the program such as exams, written projects, and scenario-based projects. These artifacts are assessed through item analysis based on the related outcome. The information presented in this report will be used to make improvements to the Accounting Technology program to improve the quality of student learning.

While the information reflected in this report assesses the program outcomes in place during the 2023-2024 year, these outcomes were updated during Spring 2024 and were effective in Fall 2024. These changes were made to more closely align the program outcomes with current accounting language and more closely align course outcomes and thus course assignments with the needs of the accounting industry. All information related to this change is listed in the addendum to this report.

Program Outcomes Rubric

Competency Areas	I	II	III	IV
Perform financial accounting and management functions using report format and procedures.	Fails to perform financial accounting and management functions using report format and procedures.	Performs either financial accounting or management functions, but not both, while attempting to use report format and procedures. Multiple errors are present.	Performs financial accounting and management functions using report format and procedures with minimal errors.	Performs financial accounting and management functions using report format and procedures.
Communicate business information effectively within a business environment.	Fails to communicate business information effectively within a business environment.	Attempts to communicate business information but fails to do so appropriately within the standards of the business environment.	Communicates business information within the business environment with minimal errors.	Communicates business information effectively within a business environment.
Demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.	Fails to demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.	Demonstrates knowledge of accounting systems for either a service, merchandising or manufacturing company, but not all three, attempting to act as a sole proprietorship, partnership, or enterprise. Multiple errors are present.	Demonstrates knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises with minimal errors.	Demonstrates knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.
Utilize current income tax resources to prepare personal tax returns.	Fails to utilize current income tax resources to prepare personal tax returns.	Prepares personal tax returns but does not utilize current resources to prepare them. Multiple errors are present.	Uses current income tax resources to prepare returns but they are prepared with minimal errors.	Utilizes current income tax resources to prepare personal tax returns.
Use technology to solve complex business issues, report, and display these solutions in an appropriate manner.	Fails to use technology to solve complex business issues, report, and display these solutions in an appropriate manner.	Uses technology to solve complex business issues but does not report or display these solutions in an appropriate manner.	Uses technology to solve complex business issues and reports or displays these solutions in an appropriate manner with minimal errors.	Uses technology to solve complex business issues, report, and display these solutions in an appropriate manner.
Demonstrate knowledge of accounting as it relates to payroll.	Fails to demonstrate knowledge of accounting as it relates to payroll.	Demonstrates knowledge of accounting as it relates to payroll with multiple errors present.	Demonstrates knowledge of accounting as it relates to payroll with minor errors which does not detract from this demonstration of knowledge.	Demonstrates knowledge of accounting as it relates to payroll.

Program Outcome # 1

Perform financial accounting and management functions using report format and procedures.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 225	Intermediate Accounting	1	7	0	1	Yes

		I	II	III	IV	Total # of Students
ACCT 225	#	0	0	3	4	7
	%	0	0	43%	57%	100%

Assessment Results

The final exam is used as the assessment artifact in Intermediate Accounting. These exams are assessed using exam item analysis.

Of the seven students completing the artifact fifty-seven percent (four students) scored in competency area IV and the remaining forty-three percent (three students) students scored in competency area III.

Analysis

During the 2023-2024 academic year in Intermediate Accounting I, one hundred percent of students (seven students) performed financial accounting and management functions using report format and procedures or either no errors or minimal errors. Currently, Cengage software is used in this course. The analytics of this software allow for item analysis of homework and exams through its report features.

Use of Results for Improvement

Students are demonstrating that they are able retain and apply the knowledge to perform financial accounting and management functions in proper report format and procedures. Therefore, the current artifact will continue to be used in the future and monitored. No changes are planned at this time.

What is the proposed timeline for the changes outlined above?

Item analysis of the final exam will continue to be used as the artifact to assess this outcome going forward. The outcome was changed during a learning outcome update that was completed during Spring 2024 and implemented in Fall 2024. This outcome was updated to now state; “Perform financial and managerial accounting functions using proper techniques and procedures.” The artifact is not changing even though the outcome changed slightly, because the outcome change did not fundamentally change the course content or outcome measures. The change was aligning words with current account language which brought the outcome, the artifact, and industry language into alignment.

Program Outcome # 2

Communicate business information effectively within a business environment.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 227	Financial Analysis and Budgeting	1	11	0	1	Yes

		I	II	III	IV	Total # of Students
ACCT 227	#	1	0	2	8	11
	%	9%	0	18%	73%	100%

Assessment Results

A public company analysis paper is used as the artifact for this outcome. Seventy-three percent of students (eight students) scored in competency area IV in this outcome while eighteen percent (two students) scored in competency area III. For comparison, eighty percent of students scored in competency area IV during the 2022-2023 academic year.

Analysis

With the high number of students scoring in competency area IV, students are able to communicate business information effectively. They are learning written communication skills throughout the curriculum in the Accounting Technology program and are able to apply those skills to complete this assignment. There is a slight decrease in the number of students scoring in competency area IV. However, they did score in competency area III, with one student continuing to score in competency area I. The difference between competency areas IV and III is due to minimal errors on the written assignment. This was

most often seen because students did not meet all the financial analysis elements required in the writing assignment. This component of the assignment and how to communicate financial analysis in writing will continue to be emphasized during the semester in other written assignments.

Use of Results for Improvement

Overall students are able to communicate effectively within a business environment. To continue to enhance student learning of communication skills, submitting written work throughout the semester will continue, with feedback given on each assignment. The requirement to submit a rough draft of this paper a week prior to the final assignment deadline will also continue. Time management will be added as an objective to the assignment of the company analysis research paper. This assignment will continue into future academic years and will continue to be used to assess this outcome.

What is the proposed timeline for the changes outlined above?

This assignment will continue in this course in Spring 2025 and be used as an artifact to assess this learning outcome. This learning outcome did not change with the updates implemented in Fall 2024.

Program Outcome # 3

Demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 219	Accounting Management Software	1	18	0	1	Yes

		I	II	III	IV	Total # of Students
ACCT 219	#	4	4	3	7	18
	%	22%	22%	17%	39%	100%

Assessment Results

Students were asked to complete transactions in QuickBooks Online accounting software and then perform accounting functions such as generating financial statements with the data entered in those transactions.

Of the eighteen students completing the artifact, thirty-nine percent (seven students) scored in competency area IV, seventeen percent (three students) students scored in competency area III, twenty-two percent (four students) scored in competency area II, and the remaining twenty-two percent (four students) scored in competency area I.

Analysis

Thirty-nine percent of students (seven students) were able to demonstrate knowledge of accounting systems for service, merchandising, and manufacturing companies operating as sole proprietorships, partnerships, or enterprises in competency area IV. Seventeen percent of students (three students) were able to demonstrate knowledge in competency

area III, which was due to errors in entry. The remaining forty-four percent scored in competency areas I and II. This was the first semester a new textbook and homework software was used. Many of the students did not manage their time well and started the project but didn't finish it. The new textbook and thus new project instructions resulted in confusion for some students, clearer instructions and assignment design will be employed in the future. During the previous year 100% of students scored in competency area IV. Students in this course are in the AAS Accounting Technology degree program as well as the AAS Business Management degree program. The analysis to determine which students from each program placed in which competency area was not completed. It could be deduced that students in the Accounting Technology program should place higher based on taking additional accounting coursework. In the future, results will be disaggregated by degree program and analysis will be done on which students performed at higher levels on this assessment artifact.

Use of Results for Improvement

The assignment artifact will be split into two assignments during the next year to help students with time management and try to keep them on task. While a similar artifact was used in the past, a new textbook was used this year that changed the actual project. Students found it difficult to navigate the project instructions and many started the project too close to the deadline to complete it effectively. During the next academic year, instructions will be more clearly defined, and time management discussions will take place earlier in the semester so students are informed of the time this project will require. Students demonstrated with assignments throughout the semester that they had the skills to demonstrate knowledge of computerized accounting systems. However, they did not demonstrate those skills on this assessment artifact. There is a strong possibility that this was not due to students' lack of knowledge but a poor design of the assignment and

instructions. Therefore, the assignment will be changed as mentioned above. Changes in the assignment and instructions are expected to result in time management and related project skill improvement.

What is the proposed timeline for the changes outlined above?

Changes to the project will be implemented during Spring 2025 semester.

This student learning outcome was updated during Spring 2024. The outcome now states, "Demonstrate effective use of computerized accounting systems for companies." The same artifact will be used to assess this outcome.

Program Outcome # 4

Utilize current income tax resources to prepare personal tax returns.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 237	Income Tax Accounting	1	6	0	1	Yes

		I	II	III	IV	Total # of Students
ACCT 237	#	3	1	0	2	6
	%	50%	16%	0%	34%	100%

Assessment Results

Students are asked to complete one personal tax return that includes multiple schedules and worksheets. Thirty-four percent (two students) completed this assignment in competency area IV. Sixteen percent (one student) completed this assignment in competency area II while fifty percent (three students) completed this assignment in competency area I.

Analysis

Sixty-eight percent of students scored in competency areas I and II and thus failed to utilize current income tax resources to prepare personal tax returns. This is an increase from sixty-one percent failure rate in the 2022-2023 academic year. This continues to be an area where students are struggling to successfully complete the assignment.

Use of Results for Improvement

After observing multiple cycles of assessment using this artifact it has been determined that changes need to be made. Student performance and student feedback indicates the design of the artifact is overwhelming and needs to be revised to more effectively assess student performance and to ensure that the assessment assignment is effectively measuring competencies described in the outcome and rubric. This course will be redesigned during the academic year 2024-2025. The redesign will result in two courses on income tax accounting topics to allow students increased time and practice before trying to complete an income tax return project.

What is the proposed timeline for the changes outlined above?

These changes will be implemented in Fall 2024 and Spring 2025. This outcome also received an update in Spring 2024. The new outcome states, "Utilize current income tax resources to prepare personal tax returns." During the course redesign process an updated income tax return artifact will be created to assess this outcome. It is anticipated that this artifact will be used in Fall 2025.

Program Outcome # 5

Use technology to solve complex business issues, report, and display these solutions in an appropriate manner.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 219	Accounting Management Software	1	18	0	1	Yes

		I	II	III	IV	Total # of Students
ACCT 219	#	1	1	1	15	18
	%	5%	5%	5%	85%	100%

Assessment Results

Students were asked to complete transactions in QuickBooks Online accounting software and then use the software to generate reports, analyze report information, and display the solutions in an appropriate manner. Eighty-five percent (fifteen students) scored in competency area IV which five percent (one student) scored in competency area III. One student (five percent) scored in competency area II while the remaining student (five percent) scored in competency area I.

Analysis

Eighty-five percent of students were able to use technology to solve complex business issues, report, and display these solutions in an appropriate manner with no errors, resulting in competency area IV. The remaining fifteen percent scored in areas III, II, and I equally. While this is a reduction in the number of students scoring in competency area IV

from 22-23 academic year, this is still a high number of students who are demonstrating acceptable entry level knowledge in this program learning outcome.

Use of Results for Improvement

Students have consistently demonstrated this knowledge year after year. This outcome is being discontinued in the 2024-2025 academic year.

What is the proposed timeline for the changes outlined above?

This outcome was discontinued during the curricular changes made during Spring 2024. Technology is embedded into most courses required for the program. It does not need to be assessed as a discrete skill in the future.

Program Outcome # 6

Demonstrate knowledge of accounting as it relates to payroll.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ACCT 218	Payroll Accounting	1	9	0	1	Yes

		I	II	III	IV	Total # of Students
Course	#	2	3	1	3	9
	%	22%	33%	12%	33%	100%

Assessment Results

The artifact for this program outcome is a payroll project in which students are asked to complete all calculations and entries for a full quarter of pay cycles.

During the 2023-2024 academic year, thirty-three percent (three students) scored in competency area IV and twelve percent (one student) scored in competency area III. Thirty-three percent (three students) scored in competency area II and twenty-two percent (two students) scored in competency I.

Analysis

During the 2023-2024 academic year, forty-five percent of students met the expectations of this assignment and demonstrated knowledge related to payroll by completing this artifact with either no or minimal minor errors. This is an increase from the 2022-2023 academic year, when only thirty-seven percent of students met expectations. This continues to be an assessment where students perform poorly. Multiple zoom sessions

were offered to assist students with the project but attendance in those sessions was poor. Time management in this project was discussed with students in written format in the online course. Students are not completing the project entirely, which is causing students to be unable to demonstrate their knowledge. This assessment will continue to be used in future years.

Use of Results for Improvement

With this being an online course, the discussion of time management for this project will continue. Multiple zoom sessions have been offered throughout the course and will continue to be offered in the future to allow students to ask questions while working on weekly homework, which should increase overall knowledge on course topics.

What is the proposed timeline for the changes outlined above?

All changes are being implemented in Fall 2024. This outcome was not altered during the changes made in Spring 2024.

Addendum

Program Name: Accounting Technology

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 20XX-XX SLO report. (Use as many pages as necessary to describe.)

In 2023-2024 a textbook update in ACCT 219- Accounting Management Software resulted in an update to the artifact used for assessment in Program Outcome 3. That artifact resulted in less students scoring in competency areas III and IV than previous years. The homework assignments presented during the semester will receive minor edits to ensure students are prepared for the project at the end of the semester and the project will be broken up into multiple assignments with multiple due dates to assist students with time management and progressing through the assignment, so they are more accurately able to demonstrate their knowledge.

Curricular changes were made during Spring 2024 to update program learning outcomes and course learning outcomes.

The program learning outcomes were updated to state:

1. Perform financial and managerial accounting functions using proper techniques and procedures.
2. Communicate business information effectively within a business environment.
3. Demonstrate effective use of computerized accounting systems for companies.
4. Utilize current income tax resources to prepare personal tax returns.
5. Demonstrate knowledge of accounting as it relates to payroll.

The following course learning outcomes were updated to state:

ACCT 211- Principles of Accounting I

1. Identify the role of the accounting profession in ethical business decision-making.
2. Apply GAAP for corporate financial reporting.
3. Demonstrate the ability to journalize and post transactions using double-entry accounting, ensuring the accounting equation remains in balance.

4. Define and explain the basic accounting principles, such as the matching principle, revenue recognition, and the accounting equation.
5. Interpret financial statements, including the income statement, balance sheet and statement of stockholder's equity.
6. Record adjusting and closing entries and demonstrate their effects on financial statements.
7. Identify and discuss the importance of internal controls in accounting, including segregation of duties and safeguarding assets.
8. Apply various methods of inventory valuation, such as FIFO (First In, First Out) and LIFO (Last In, First Out).
9. Recognize and discuss ethical issues in accounting, emphasizing the importance of integrity and professional conduct.
10. Calculate financial ratios and use them to evaluate business performance.

ACCT 212-Principles of Accounting II

1. Construct a statement of cash flows using information from the accrual basis balance sheet and income statement.
2. Evaluate the financial health and performance of an organization based on its financial statements.
3. Differentiate between various cost classifications, such as variable, fixed, direct, and indirect costs.
4. Demonstrate job order and process costing procedures and budget preparation.
5. Create and analyze budgets for various business functions, including sales, production, and capital expenditures.
6. Analyze and interpret variances between actual and budgeted performance.
7. Comprehend the principles of activity-based costing and its application in allocating indirect costs.

ACCT 218 – Payroll Accounting

1. Describe and discuss employment and payroll laws.
2. Compute gross earnings.
3. Calculate the amount of federal income tax withholding, FICA taxes, nontax payroll deductions, and unemployment tax.
4. Record employees' wages in payroll register by payroll period.
5. Prepare employees' earnings records.
6. Explain payroll deposit requirements.
7. Journalize the entries to record the payroll, payroll taxes, and payment of payroll-related liabilities.
8. Demonstrate proficiency in using a 10-key calculator.

ACCT 219- Accounting Management Software

1. Complete exercises involving edits to or creating accounts in the chart of accounts, vendors, and customers.
2. Complete exercises involving accounts receivable, accounts payable, inventory, bank, and credit card transactions.
3. Prepare financial statements using QuickBooks Online software.
4. Complete the accounting cycle using QuickBooks Online.

ACCT 225- Intermediate Accounting

1. Demonstrate an understanding of accounting standards, particularly those related to financial reporting, as established by relevant accounting bodies.
2. Apply accounting principles and concepts to analyze and record complex business transactions, including revenue recognition, expense allocation, and accounting for financial instruments.
3. Prepare financial statements ensuring compliance with accounting standards and regulations.
4. Demonstrate accounting for various types of assets and liabilities, such as property, plant, and equipment, intangible assets, current and long-term liabilities, and contingencies.
5. Analyze financial statements to assess a company's financial performance, liquidity, solvency, and overall financial health.
6. Be aware of and adhere to ethical principles and professional standards in the accounting profession, understanding the importance of integrity, objectivity, confidentiality, and professional skepticism.
7. Communicate financial accounting information orally and in writing.

ACCT 258- Cost Accounting

1. Evaluate the cost of materials, labor, and overhead.
2. Analyze the costs of the business for managerial decisions.
3. Prepare a master budget and related schedules.
4. Apply relevant costs to make informed decisions, such as product pricing, make-or-buy choices, and special-order decisions.
5. Calculate and allocate costs in job order and process costing environments.
6. Understand the principles of activity-based costing and apply it to allocate costs more accurately.
7. Define and differentiate between various cost concepts, such as fixed costs, variable costs, direct costs, and indirect costs.

This update was made to more closely align the program outcomes with current accounting language and more closely align course outcomes, and thus course assignments, with the needs of the accounting

industry. Program outcome mapping was updated after all the changes were made. Courses that were not updated in this change are scheduled to be revised and/or discontinued during the 2024-2025 academic year. The artifacts used for assessment will continue to be used in the future unless otherwise noted in the related outcome.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)



THREE RIVERS COLLEGE

Agribusiness AAS

Program Level SLO Report

Kathryn Clark – Program Manager

2023-2024

Program Purpose Statement

This program is for students who want to develop management and technical skills to enter agriculture-related industry or production.

Program Outcomes

- Examine principles of plant, animal, and soil science.
- Apply analytical and critical thinking skills in relation to agribusiness management.
- Form technical knowledge and professional skills in relation to agribusiness industries.
- Demonstrate written and verbal communication to effectively work in agricultural professions.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Agribusiness: Program Outcomes Mapping 2023-2024

Program Outcome 1: Examine principles of plant, animal, and soil science.	
Course	Course Learning Outcome (CLO)
AGRI 110 Soils & Soil Fertility	Evaluate the functions of soil in the ecosystem, its formation from parent material and classifications.
	Examine soil architecture characteristics and its relationship to water, air and temperature.
	Relate soil colloids, pH, organisms, and organic matter examining their productivity affect.
	Assess a soil nutrient test to determine the amendments needed for optimum plant growth.
AGRI 120 Plant Science	Examine plant science history, current trends, issues and the subsequent impact on the ecosystem.
	Analyze external and internal structures of higher plants.
	Evaluate the stages of plant growth and development with emphasis placed on plant chemistry, photosynthesis, and respiration.
	Relate mendelian concepts to techniques for plant improvement.

	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 122 Natural Resource Management	To examine our natural resources in historical terms from the 1600's to present.
	To be familiar with legislation aimed at protecting and preserving our natural resources.
AGRI 130 Animal Science	Classify cattle, sheep, swine and horses with emphasis placed on family, genus and species.
	Compare specific breeds of beef cattle, dairy cattle, sheep, swine and horses.
	Evaluate digestive processes of ruminant and monogastric species to determine nutritional needs.
	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Compare and contrast pesticides and alternative control methods.
	Evaluate toxicity, handling procedures, and the legal use of pesticides.
	Examine a pesticide label and correctly recommend a pesticide according to label directions.
	Prepare for pesticide applications using correct spray mix formulations and equipment calibrations.
	Assess the various classes of pesticides based on their modes of action.
AGRI 240 Agriculture Economics & Marketing	Compare and contrast physical and financial measures of food production profitability.
AGRI 270 Agriculture Systems Management	Demonstrate the ability to read land descriptions.

Program Outcome 2:	
Apply analytical and critical thinking skills in relations to agribusiness management.	
Course	Course Learning Outcome (CLO)
AGRI 110 Soils & Soil Fertility	Relate soil colloids, pH, organisms, and organic matter examining their productivity affect.
	Assess a soil nutrient test to determine the amendments needed for optimum plant growth.
AGRI 120 Plant Science	Analyze external and internal structures of higher plants.
	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 122 Natural Resource Management	To develop management skills in the areas of soil, water, forestry and wildlife.
	To apply natural resource management skills to current farming

	practices.
	To examine our natural resources in historical terms from the 1600's to present.
AGRI 130 Animal Science	Compare specific breeds of beef cattle, dairy cattle, sheep, swine and horses.
	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Compare and contrast pesticides and alternative control methods.
	Evaluate toxicity, handling procedures, and the legal use of pesticides.
	Examine a pesticide label and correctly recommend a pesticide according to label directions.
	Prepare for pesticide applications using correct spray mix formulations and equipment calibrations.
	Assess the various classes of pesticides based on their modes of action.
AGRI 240 Agriculture Economics & Marketing	Evaluate macroeconomics and microeconomics as they relate to food production.
	Assess financial policies affecting agribusiness.
	Compare and contrast physical and financial measures of food production profitability.
	Examine the basic principles involved in futures trading.
	Evaluate economic indicators of world food supply and demand to include business types, competition, and world trade.
AGRI 270 Agriculture Systems Management	Recognize the importance of machinery economics and efficiency.
	Demonstrate the ability to read land descriptions.
BLAW 221 Legal and Ethical Environment of Business	Discuss the elements of a contract and the rights and obligations within.
	Analyze business regulations for their moral and ethical value and determine how they impact the business environment.
	Distinguish when the law of contract and the law of sales are to be applied.

Program Outcome 3:

Form technical knowledge and professional skills in relation to agricultural industries.

Course	Course Learning Outcome (CLO)
AGRI 110 Soils & Soil Fertility	Evaluate the functions of soil in the ecosystem, its formation from parent material and classifications.
	Examine soil architecture characteristics and its relationship to water, air and temperature.

	Relate soil colloids, pH, organisms, and organic matter examining their productivity affect.
	Assess a soil nutrient test to determine the amendments needed for optimum plant growth.
AGRI 120 Plant Science	Analyze external and internal structures of higher plants.
	Evaluate the stages of plant growth and development with emphasis placed on plant chemistry, photosynthesis, and respiration.
	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 130 Animal Science	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Compare and contrast pesticides and alternative control methods.
	Evaluate toxicity, handling procedures, and the legal use of pesticides.
	Examine a pesticide label and correctly recommend a pesticide according to label directions.
	Prepare for pesticide applications using correct spray mix formulations and equipment calibrations.
	Assess the various classes of pesticides based on their modes of action.
AGRI 240 Agriculture Economics & Marketing	Evaluate macroeconomics and microeconomics as they relate to food production.
	Assess financial policies affecting agribusiness.
	Compare and contrast physical and financial measures of food production profitability.
	Examine the basic principles involved in futures trading.
	Evaluate economic indicators of world food supply and demand to include business types, competition, and world trade.
AGRI 270 Agriculture Systems Management	Demonstrate the ability to conduct machinery calibrations.
	Discuss equipment used in agriculture from simple machines to complex internal combustion engines.

Program Outcome 4:

Demonstrate written and verbal communication to effectively work in agricultural professions.

Course	Course Learning Outcome (CLO)
AGRI 110 Soils & Soil Fertility	Assess a soil nutrient test to determine the amendments needed for optimum plant growth.
AGRI 120 Plant Science	Prepare a weed and crop collection with emphasis placed on

	floral, forage, row, and vegetable crops.
AGRI 130 Animal Science	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Examine a pesticide label and correctly recommend a pesticide according to label directions.
AGRI 240 Agriculture Economics & Marketing	Assess financial policies affecting agribusiness.
	Compare and contrast physical and financial measures of food production profitability.
	Evaluate economic indicators of world food supply and demand to include business types, competition, and world trade.
AGRI 270 Agriculture Systems Management	Discuss the policies which affect the money supply in agribusiness.
	Demonstrate the ability conduct machinery calibrations...
	Recognize the importance of machinery economics and efficiency.
	Demonstrate the ability to read land descriptions.

Introduction

The student learning outcomes for the Agribusiness AAS program outline the essential knowledge and understanding that agriculture professionals should possess as they enter the workforce. During the 2023-2024 academic year, data was gathered from the following courses:

- AGRI 110: Soil & Soil Fertility
- AGRI 120: Plant Science
- AGRI 130: Animal Science
- AGRI 270: Agricultural Systems Management

Project artifacts collected from these courses served as the basis for the data included in the SLO report. Following the collection, the data was analyzed and integrated into the report to facilitate ongoing improvements to our program.

The SLO objectives for the 2024-2025 academic year were reviewed and updated to align more closely with the evolving needs of the agribusiness industry. The revised objectives focus on:

- Demonstrate a practical understanding of plant, animal, and soil science principles.
- Utilize analytical and critical thinking skills for decision-making within the agribusiness sector.
- Assess and implement effective business practices across various agribusiness activities.
- Exhibit strong written and verbal communication skills to collaborate effectively with agricultural professionals and stakeholders.

Program Outcomes Rubric

PLO #1: Demonstrate an applied understanding of the principles of plant, animal, and soil science.

Competency Areas	I	II	III	IV
AGRI 130-Animal	Knowledge is narrow and incomplete	Moderate knowledge with significant gaps or deficiencies	Significant knowledge with notable gaps or deficiencies	Knowledge base comprehensive and balanced
AGRI 120-Plant	Knowledge is narrow and incomplete	Moderate knowledge with significant gaps or deficiencies	Significant knowledge with notable gaps or deficiencies	Knowledge base comprehensive and balanced
AGRI 110-Soil	Knowledge is narrow and incomplete	Moderate knowledge with significant gaps or deficiencies	Significant knowledge with notable gaps or deficiencies	Knowledge base comprehensive and balanced

Program Outcome #1

Examine principles of plant, animal, and soil science.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 130	Animal Science	2	32	1 section with 16	1	Yes
AGRI 120	Plant Science	3	33	2 F2F with 17 students	1	Yes
Agri 110	Soil & Soil Fertility	3	24	2 F2F sections 12 students	1	Yes

		I	II	III	IV	Total # of Students
Course AGRI 130	#	0	3	3	18	24
	%	0	12.5%	12.5%	75%	
AGRI 120	#	0	3	1	18	22
	%		13%	5%	82%	
AGRI 110	#			3	15	18
	%			17%	83%	

Assessment Results

Program Outcome #1: *Examine principles of plant, animal, and soil science* is evaluated through three key areas: animal science, plant science, and soil science, using data collected from AGRI 130, AGRI 120, and AGRI 110 courses.

AGRI 130: Animal Science

- This course, offered both face-to-face and online during the same fall semester, included dual credit students in the online section.
- Assessment focused on the *Herd Health Project*, which examines basic principles of animal science.
- Results showed that slightly more than half of the students achieved *Level IV* success, with very few falling to the middle performance levels.

AGRI 120: Plant Science

- The assessment was a plant ID poster assignment.
- 82% of students scored at *Level IV*, demonstrating a high level of understanding of plant science principles.
- The remaining 18% of students scored in the middle performance range.

AGRI 110: Soil Science

- 83% of students achieved *Level IV* performance in this course.

- h. 17% of students scored at *Level III*, indicating room for growth in their understanding of soil science principles.

Overall, the data reflects strong performance in the plant and soil science areas, with room for improvement in animal science outcomes, particularly for online and dual credit students.

Analysis

The results indicate that while most students are meeting *Program Outcome #1* across the three areas (animal, plant, and soil science), there is a need to strengthen their understanding of the assignment and related concepts.

Participation Data:

- **23 students** across the three courses did not complete the measurement tools:
 - AGRI 130: 8 students
 - AGRI 120: 11 students
 - AGRI 110: 4 students
- Of these, only **6 students** were enrolled in face-to-face (F2F) courses, with the majority being online or dual credit students.

Key Insights:

1. The majority of students successfully achieved the program objectives, especially in plant and soil science.
2. The lower participation rates in the measurement tools—particularly among online and dual credit students—may indicate challenges with engagement or clarity in expectations for these groups.

Despite the participation challenges, the overall objective has been largely met across the three areas, demonstrating a strong foundation for continued success.

Use of Results for Improvement

Course-Specific Changes:

AGRI 130: Animal Science

Rubric Enhancements:

- a. Develop a more detailed rubric to clearly outline expectations.

Improved Examples:

- b. Create a sample herd health calendar and production examples.
- c. Provide realistic scenarios for students to evaluate herds.

Assignment Management:

- d. Introduce multiple check-in points to minimize procrastination and ensure understanding.
- e. Provide a structured calendar as a guide for completing the project.
- f. Establish due dates for each component of the assignment to break it into manageable parts.

Instructional Improvements:

- g. Address areas where students struggle, particularly in creating production calendars.
- h. Enhance teaching methods and examples related to this topic.

AGRI 110: Soil Science

Instructional Videos:

- a. Develop and provide videos for online students to better understand the soil survey Geo Data system.

Deeper Exploration:

- b. Offer a more in-depth look at soil types and their application using the Geo Data program.

AGRI 120: Plant Science

Expanded Objectives:

- a. Refocus the measurement tools to encompass broader educational objectives.

- b. Move beyond basic identification, taxonomy, and plant information to include application in garden or farm settings.
- c. Incorporate practical tasks that link theoretical concepts to real-world agricultural practices.

These changes aim to enhance student understanding, engagement, and success across all three courses while addressing the specific challenges identified in the assessment results.

What is the proposed timeline for the changes outlined above?

AGRI 130- Created and implemented by Oct 1, 2024.

AGRI 110- met by Jan 20, 2025

AGRI 120- Oct 15, 2024

Additional Summary Notes

Anomalies in the results that were noticed:

Face-to-Face (F2F) Student Performance

- F2F students demonstrated a stronger grasp of concepts, likely due to access to the 3R cattle as a tangible example for their herd health project.
- Having the farm manager available on-site as a resource for questions proved beneficial, with some students actively utilizing this opportunity.

Participation Challenges

- Student participation in larger assignments was notably lower, with many students not even attempting these tasks.

Program Outcomes Rubric

PLO #2 Apply analytical and critical thinking skills in relation to decision making in agriculture industry.

Competency Areas	I	II	III	IV
	Cannot distinguish relevant from irrelevant information and/or cannot apply information appropriately.	Partially recognizes relevant information, and/or cannot apply information appropriately without significant guidance.	Recognizes relevant information. Applies information appropriately and generally arrives at the correct answer.	Recognizes relevant information. Applies information appropriately and consistently and independently arrives at the correct answer.

Program Outcome # 2

Apply analytical and critical thinking skills in relations to agribusiness management.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 120	Plant Science	3	34	2 Sections with 17 students	1	Yes
AGRI 130	Animal Science	2	32	1 section with 16	1	Yes

		I	II	III	IV	Total # of Students
Course AGRI 120	#	0	0	0	23	23
	%	0%			100%	
AGRI 130-Animal Science	#	2	3	4	17	26
	%	8%	12%	15%	65%	

Assessment Results

Outcome #2: *Apply analytical and critical thinking skills in relation to agribusiness management.*

AGRI 120: Plant Science

Task: Students were tasked with preparing plant ID slides.

Results:

- **100%** of participating students scored at *Level 4*, indicating a strong grasp of the task and application of analytical skills.
- However, the participation rate was low, with many students not engaging in the measurement.

AGRI 130: Animal Science

Task: Students applied analytical skills in relation to breed information, production calendars, and disease prevention plans inside of the herd health project.

Results:

- **65%** of students achieved *Level 4*, demonstrating a solid understanding of the material.
- **27%** were in the middle performance range, showing moderate understanding.
- **8%** of students scored at *Level 1*, indicating significant challenges with the concepts and tasks.

Both courses show overall strong performance in Outcome #2, but improvements in engagement and targeted support for struggling students will help ensure more consistent success across the board.

Analysis

AGRI 120: Plant Science

Observation: There was no middle range in the assessment, with students either achieving *Level 4* or not participating.

Recommendation: To improve measurements and ensure a more accurate distribution of performance levels, a higher level of Depth of Knowledge (DOK) needs to be incorporated into the assessment. Consider incorporating more complex tasks that require students to apply knowledge in a variety of contexts building onto the assignment.

AGRI 130: Animal Science

Observation: While 65% of students scored at *Level 4*, there is a noticeable gap in performance, with 27% in the middle and 8% at *Level 1*. This indicates a need for improved understanding among the students who are not meeting the rubric's expectations for the middle and lower levels.

Recommendation: More focused instructional strategies are necessary to support students who fall into the middle and lower levels. This may include:

- Providing additional practice assignments or examples tailored to these students' needs.
- Offering more hands-on opportunities or interactive discussions to strengthen their grasp of breed information, production planning, and disease prevention.
- Creating more formative assessments that allow for earlier identification of students needing extra help.

Both courses would benefit from adjustments to ensure that the measurements capture a fuller range of student abilities, allowing for more effective differentiation and improvement in performance.

Use of Results for Improvement

AGRI 120: Plant Science

Focus on Concept Over Quantity: Instead of emphasizing the number of plant IDs in the project, focus more on the depth of understanding for each plant and concept met.

Reduced Plant ID List: Lower the number of plants required for identification but ask for more detailed information about each plant, such as growth habits, ideal conditions, and uses.

Earlier Assignment Distribution: Provide the assignment earlier in the semester so students can document plants while they are still alive and in active growth, rather than dormant.

Application to Real-World Context: Have students take it a step further by integrating their plant knowledge into a production calendar or garden plan, applying what they've learned to real agricultural scenarios.

AGRI 130: Animal Science

Focus on Disease Prevention and Production Calendar: Since students struggled with planning disease prevention and creating a production calendar, more focused instruction is needed in these areas.

Provide additional practice scenarios or examples to help students better understand how to create and implement a disease prevention plan.

Offer guidelines and templates for creating production calendars to help students visualize the process and understand its real-world application.

Incorporate more interactive exercises and check-ins to ensure students can effectively apply these concepts throughout the course.

These adjustments aim to improve student understanding by emphasizing quality over quantity in assignments and providing more focused support in areas where students struggle most.

What is the proposed timeline for the changes outlined above?

AGRI 120- Have tool redesigned by Oct 15, 2024.

AGRI 130- Lesson revision and giving better examples of the concepts not met by Nov 1, 2024.

Additional Summary Notes

Anomalies in the results that were noticed:

F2F students in AGRI 120 had 9 not submit assignment or attempt it.

Program Outcomes Rubric

PLO #3 Form technical knowledge and professional skills in relation to agribusiness industries.

Competency Areas	I	II	III	IV
	Fails to demonstrate knowledge or skills.	Demonstrates rudimentary knowledge and general skills	Demonstrates knowledge and skills sufficient to perform general technical operations.	Demonstrates knowledge and skills sufficient to perform complex technical operations.

Program Outcome # 3

Form Technical knowledge and professional skills in relation to agriculture industries.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 270	Ag Systems Management	1	8	1 section of 8 students	1	Yes

		I	II	III	IV	Total # of Students
Course Agri 270	#			3	5	8
	%			38%	62%	

Assessment Results

Outcome #3: *Form technical knowledge and professional skills in relation to agricultural industries.*

AGRI 270: Agricultural Systems Management

Task: Students discussed various agricultural equipment, ranging from simple machines to complex internal combustion engines.

Results:

- **38%** of students achieved *Level 3*, demonstrating a solid understanding of the equipment and its applications in agriculture.
- **62%** of students achieved *Level 4*, indicating a higher level of mastery and technical understanding of the equipment discussed.

Analysis

- **Strong Performance:** The majority of students (62%) reached *Level 4*, reflecting strong technical knowledge and understanding.
- **Opportunity for Growth:** While 38% of students performed well at *Level 3*, there is room for improvement in this group to elevate their understanding to the highest level.

Students are struggling to meet both the knowledge and skills components required to achieve *Level 3*. While they may have successfully completed the lab portion of the course, they often fall short in the application of reflection or journal aspects of the measurement tool, or vice versa.

By ensuring that both the knowledge and skills components are addressed simultaneously and by providing clearer guidance and structured support, students will be better positioned to succeed in achieving *Level 3* and progressing toward *Level 4*.

Use of Results for Improvement

Briggs & Stratton's partnership will provide upgraded engines for AGRI 270 labs by January 15th, 2025 ensuring students can effectively complete practical tasks. Previously, the

campus engines were missing or damaged parts, preventing students from fully disassembling and reassembling them to test if they could run properly. While students were able to identify parts during disassembly, they missed the crucial step of reassembly and testing. To address this, the updated engines will support the full process, including making them operational. Additionally, structured journal checkpoints will be introduced to promote accountability and reinforce the application of theoretical knowledge throughout the lessons.

What is the proposed timeline for the changes outlined above?

Reaching out to Briggs for new motors to utilize for class Jan 15, 2025

Journal and check in dates set prior to the syllabus- Jan 1, 2025

Program Outcomes Rubric

PLO #4 Demonstrate written and verbal communication to effectively work in agricultural professions.

Competency Areas	I	II	III	IV
	Fails to identify most relevant information and fails to organize it for effective use in agribusiness contexts.	Fails to identify most relevant information or fails to organize it for effective use in agribusiness contexts.	Organize and deliver critical information using correct terminology that demonstrates thorough understanding in agribusiness contexts. But fails to use appropriate terminology or uses the terminology incorrectly.	Effectively communicates critical information using correct terminology that demonstrates thorough understanding in agribusiness contexts.

Program Outcome #4

PLO #4 Demonstrate written and verbal communication to effectively work in agricultural professions

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 130	Animal Science	2	32	1 section with 16	1	Yes

		I	II	III	IV	Total # of Students
Course AGRI 130	#	0	0	15	11	26
	%			58%	42%	

Assessment Results

Program Learning Objective #4: *Demonstrate written and verbal communication skills to effectively work in agricultural professions.*

- **42%** of students achieved *Level 4*, indicating a high level of proficiency in both written and verbal communication skills.
- **58%** of students achieved *Level 3*, demonstrating a solid understanding of communication but with room for improvement in certain areas.

Analysis

Key areas for improvement include reinforcing proper terminology in animal science courses, particularly for online students, and enhancing record-keeping skills. These aspects are essential for students to succeed in both theoretical understanding and practical application within the field.

Use of Results for Improvement

Incorporate clearer examples and terminology into the grading rubric, emphasizing the importance of record-keeping in agriculture as part of the assignment.

What is the proposed timeline for the changes outlined above?

Steps in terminology added to rubric- October 1, 2024

Importance of record keeping and samples to use in process with the Electronic ID system being utilized for F2F students and will be used as sample for the online students- Oct 15th.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 2022-2023 SLO report. (Use as many pages as necessary to describe.)

Changes in the curriculum would be grid changes for 23-24 year:

- Add certificate option by aligning those classes to be completed 1st year.
- Taking out the elective option, ECON 212, BUAD 221, and ACCT 212. Concepts taught in ECON 212 are covered in AGRI 240 and the basic needs met with ACCT 211.
- AGRI 234 Equine Science course dropped after advisory committee recommended it as no longer necessary
- AGRI 232 dropped from grid.
- BLAW221, AGRI 122, and MKTG 115 were added to the new grid.
- AGRI 232- Advance Animal Science dropped from courses.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

Introducing a certificate option for first-year students provided an opportunity for those who might leave due to job commitments to still earn a credential.

Electives were removed, as the concepts previously taught in those courses are now covered in other required classes that align with our learning outcomes.

With the changes made adding BLAW 221, AGRI 122, and MKTG 115 addressed key areas of weakness and ensured that all necessary learning outcomes are met for FY25.



THREE RIVERS COLLEGE

Agriculture Systems Technician AAS

Program Level SLO Report

Kathryn Clark – Program Manager

2023-2024

Program Purpose Statement

The purpose of the Agriculture Systems Technician AAS program is to provide students with skills in commercial driving, welding, and pest management for entry-level positions such as farm mechanics, agriculture technicians, and production welders in agriculture-related industries.

Program Outcomes

- Examine principles of pesticide applications, commercial driving, and welding techniques.
- Apply analytical and critical thinking skills in relation to the agriculture industry.
- Form technical knowledge and skills in relation to agriculture industries.
- Demonstrate written and verbal communication to effectively work in agricultural professions.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Agriculture Systems Technician: Program Outcomes Mapping 2023-2024

Program Outcome 1: Examine principles of pesticide application, commercial driving, and welding techniques.	
Course	Course Learning Outcome (CLO)
AGRI 172 Integrated Pest Management	Recognition of the benefits and risks associated with using pesticides and look for alternatives.
	Understand toxicity levels of pesticides, safe handling procedures, and laws governing their use.
	Interpret a pesticide label and correctly recommend a pesticide according to label directions.
	Calculate spray mix formulations and calibrate equipment for pesticide applications.
	Identify the various classes of pesticides and their modes of kill.
TRNS 105 Commercial Driving	Plan a trip accounting for road conditions, restrictions, laws and regulations associated with the operation of a commercial vehicle while using required documentation and tools to maintain an accurate driver logbook.
	Conduct pre-trip inspections appropriately by correctly identifying all vehicle parts, their purpose, and acceptable operating ranges along with the controls for starting the engine, shifting, accelerating, braking, and parking.

	Demonstrate driving techniques to operate a commercial vehicle safely in compliance with all regulations.
	Complete the Missouri State CDL permit test, the Missouri State CDL exam, and be qualified for employment in the transportation industry.
	Plan a trip accounting for road conditions, restrictions, laws and regulations associated with the operation of a commercial vehicle while using required documentation and tools to maintain an accurate driver logbook.
WELD 156 Introduction to SMAW	Demonstrate the safety requirements for Shielded Metal Arc Welding (SMAW).
	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
	Recognize the welding symbols, terminology, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match weld drawings.
	Collaborate by using appropriate terminology with other individuals and team members, and professionals.
WELD 158 Introduction to GMAW	Develop the safety practices for the use of Gas Metal Arc Welding (GMAW) equipment.
	Demonstrate fundamental procedures of Gas Metal Arc Welding (GMAW) and the ability to weld in various welding positions.
	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match weld drawings.
	Collaborate with individuals and team members using appropriate terminology.
WELD 167 Thermal Cutting	Demonstrate the use of manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel.
	Demonstrate the use of mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel.
	Demonstrate the use of manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum.
	Demonstrate the use of manual air carbon arc cutting and gouging operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel.
WELD 265 Welding Fabrication	Demonstrate safe use of oxy-fuel and electric welding equipment.
	Demonstrate cutting and fabrication techniques to match complex welding assembly drawings.

Program Outcome 2:

Apply analytical and critical thinking skills in relation to the agricultural industry.

Course	Course Learning Outcome (CLO)
AGRI 120 Plant Science	Identify external and internal structures of higher plants.
	Describe the stages of plant growth and development with emphasis placed on plant chemistry, photosynthesis, and respiration.
	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 130 Animal Science	Identify specific breeds in beef cattle, dairy cattle, sheep, swine and horses.
	Understand digestive processes in ruminant and monogastric species and their subsequent nutritional needs.
	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Recognition of the benefits and risks associated with using pesticides and look for alternatives.
	Understand toxicity levels of pesticides, safe handling procedures, and laws governing their use.
	Interpret a pesticide label and correctly recommend a pesticide according to label directions.
	Calculate spray mix formulations and calibrate equipment for pesticide applications.
AGRI 270 Agriculture Systems Management	Identify the various classes of pesticides and their modes of kill.
	Recognize the importance of machinery economics and efficiency.
	Demonstrate the ability to read land descriptions.

Program Outcome 3:

Form technical knowledge and skills in relation to agricultural industries.

Course	Course Learning Outcome (CLO)
AGRI 120 Plant Science	Identify external and internal structures of higher plants.
	Describe the stages of plant growth and development with emphasis placed on plant chemistry, photosynthesis, and respiration.
	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 130 Animal Science	Describe zoological classifications of cattle, sheep, swine, and horses with emphasis placed on family, genus, and species.
	Identify specific breeds in beef cattle, dairy cattle, sheep, swine, and horses.
	Understand digestive processes in ruminant and monogastric species and their subsequent nutritional needs.
	Prepare disease prevention plans for cattle, sheep, swine and horses.

AGRI 172 Integrated Pest Management	Recognition of the benefits and risks associated with using pesticides and look for alternatives.
	Understand toxicity levels of pesticides, safe handling procedures, and laws governing their use.
	Interpret a pesticide label and correctly recommend a pesticide according to label directions.
	Calculate spray mix formulations and calibrate equipment for pesticide applications.
	Identify the various classes of pesticides and their modes of kill.
AGRI 270 Agriculture Systems Management	Demonstrate the ability to conduct machinery calibrations.
	Discuss equipment used in agriculture from simple machines to complex internal combustion engines.
ELEC 115 Applied DC and AC Circuits	Interpret basic electrical circuit functions from simple electrical circuit diagrams.
	Test and evaluate basic circuit functions using basic test equipment and troubleshooting techniques.
WELD 165 Welding Blueprint Reading	Demonstrate competency in interpreting weld blueprint part and assembly drawings. (CLO 2)
	Translate weld symbols and blueprint information. (CLO 3)
	Distinguish views, materials, measurements, and tolerances. (CLO 4)
WELD 265 Welding Fabrication	Demonstrate cutting and fabrication techniques to match complex welding assembly drawings. (CLO 3)
	Apply information from Weld Blueprints to fabricate complex parts and assemblies.

Program Outcome 4:

Demonstrate written and verbal communication to effectively work in agricultural professions.

Course	Course Learning Outcome (CLO)
AGRI 120 Plant Science	Prepare a weed and crop collection with emphasis placed on floral, forage, row, and vegetable crops.
AGRI 130 Animal Science	Prepare disease prevention plans for cattle, sheep, swine and horses.
AGRI 172 Integrated Pest Management	Discuss equipment used in agriculture from simple machines to complex internal combustion engines.
AGRI 270 Agriculture Systems Management	Discuss the policies which affect the money supply in agribusiness.
	Demonstrate the ability to conduct machinery calibrations...
	Recognize the importance of machinery economics and efficiency.
	Demonstrate the ability to read land descriptions.

Introduction

The Agriculture Systems Technician (AGST) AAS program establishes the foundational knowledge and practical skills necessary for students to succeed in the agriculture industry. During the 2023-2024 academic year, key data was gathered from courses such as AGRI 110 (Soil & Soil Fertility), AGRI 120 (Plant Science), AGRI 130 (Animal Science), and AGRI 270 (Agricultural Systems Management).

This data, derived from project artifacts collected during these courses, has been analyzed to inform the Student Learning Outcomes (SLO) report. These findings guide the program's continuous improvement efforts.

For the upcoming academic year (2024-2025), adjustments to the SLO objectives have been carefully reviewed and aligned with evolving industry needs. As part of this realignment, CDL was removed from the curriculum due to lack of enrollment, and new objectives have been proposed to enhance students' practical understanding and decision-making skills in agricultural contexts:

- Demonstrate an applied understanding of agricultural land and equipment maintenance.
- Apply analytical and critical thinking skills in relation to decision making in agriculture industry.
- Maintain records and perform calculations relevant to contemporary agriculture systems.

Program Outcomes Rubric

PLO #1: Examine principles of pesticide applications, commercial driving, and welding techniques.

Competency Areas	I	II	III	IV
	Knowledge is narrow and incomplete	Moderate knowledge with significant gaps or deficiencies	Significant knowledge with notable gaps or deficiencies	Knowledge base comprehensive and balanced

Program Outcome #1

Examine principles of pesticide applications, commercial driving, and welding techniques.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 120	Plant Science	3	33	2 F2F with 17 students	1	Yes

		I	II	III	IV	Total # of Students
AGRI 120 Plant Science	#	0	3	1	18	22
	%		13%	5%	82%	

Assessment Results

Program Outcome #1: *Examine principles of pesticide applications, commercial driving, and welding techniques.*

AGRI 120: Plant Science

- a. The assessment was a plant ID poster assignment.
- b. 82% of students scored at *Level IV*, demonstrating a high level of understanding of plant science principles.
- c. The remaining 18% of students scored in the middle performance range.

Analysis

Despite strong performance in AGRI 120, student engagement on larger assignments was limited. Additionally, low enrollment hindered evaluation of welding and CDL components.

Use of Results for Improvement

Course-Specific Changes:

AGRI 120: Plant Science

Expanded Objectives:

- a. Refocus the measurement tools to encompass broader educational objectives.
- b. Move beyond basic identification, taxonomy, and plant information to include application in garden or farm settings.
- c. Incorporate practical tasks that link theoretical concepts to real-world agricultural practices.

What is the proposed timeline for the changes outlined above?

AGRI 120- Taking the number of plant ID to a layout of utilizing those plants in a garden/farm setting assignment by Oct 15th.

A new program alignment for Fall 2024 to include One Year Certificate, Agriculture Equipment Option, and Diesel Technology Option.

Additional Summary Notes

Anomalies in the results that were noticed:

The use of welding and CDL for course evaluation was not measured, as at the time we had no students enrolled in our program on those courses.

Program Outcomes Rubric

PLO #2 Apply analytical and critical thinking skills in relation to decision making in agriculture industry.

Competency Areas	I	II	III	IV
	Cannot distinguish relevant from irrelevant information and/or cannot apply information appropriately.	Partially recognizes relevant information, and/or cannot apply information appropriately without significant guidance.	Recognizes relevant information. Applies information appropriately and generally arrives at the correct answer.	Recognizes relevant information. Applies information appropriately and consistently and independently arrives at the correct answer.

Program Outcome # 2

Apply analytical and critical thinking skills in relations to agriculture industry.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 120	Plant Science	3	35	2 Sections with 17 students	1	Yes
AGRI 130	Animal Science	2	32	1 section with 16	1	Yes

		I	II	III	IV	Total # of Students
Course AGRI 120 Plant Science	#	0	0	0	23	23
	%	0%			100%	
AGRI 130-Animal Science	#	2	3	4	17	26
	%	8%	12%	15%	65%	

Assessment Results

Program Outcome #2: *Apply analytical and critical thinking skills in relation to agribusiness management.*

AGRI 120: Plant Science

Task: Students were tasked with preparing plant ID slides.

Results:

- **100%** of participating students scored at *Level 4*, indicating a strong grasp of the task and application of analytical skills.
- However, the participation rate was low, with many students not engaging in the measurement.

AGRI 130: Animal Science

Task: Students applied analytical skills in relation to breed information, production calendars, and disease prevention plans inside of the herd health project.

Results:

- **65%** of students achieved *Level 4*, demonstrating a solid understanding of the material.
- **27%** were in the middle performance range, showing moderate understanding.
- **8%** of students scored at *Level 1*, indicating significant challenges with the concepts and tasks.

Both courses show overall strong performance in Outcome #2, but improvements in engagement and targeted support for struggling students will help ensure more consistent success across the board.

Analysis

AGRI 120: Plant Science

Observation: There was no middle range in the assessment, with students either achieving *Level 4* or not participating.

Recommendation: To improve measurements and ensure a more accurate distribution of performance levels, a higher level of Depth of Knowledge (DOK) needs to be incorporated into the assessment. Consider incorporating more complex tasks that require students to apply knowledge in a variety of contexts building onto the assignment.

AGRI 130: Animal Science

Observation: While 65% of students scored at *Level 4*, there is a noticeable gap in performance, with 27% in the middle and 8% at *Level 1*. This indicates a need for improved understanding among the students who are not meeting the rubric's expectations for the middle and lower levels.

Recommendation: More focused instructional strategies are necessary to support students who fall into the middle and lower levels. This may include:

- Providing additional practice assignments or examples tailored to these students' needs.
- Offering more hands-on opportunities or interactive discussions to strengthen their grasp of breed information, production planning, and disease prevention.
- Creating more formative assessments that allow for earlier identification of students needing extra help.

Both courses would benefit from adjustments to ensure that the measurements capture a fuller range of student abilities, allowing for more effective differentiation and improvement in performance.

Use of Results for Improvement

AGRI 120: Plant Science

Focus on Concept Over Quantity: Instead of emphasizing the number of plant IDs in the project, focus more on the depth of understanding for each plant and concept met.

Reduced Plant ID List: Lower the number of plants required for identification but ask for more detailed information about each plant, such as growth habits, ideal conditions, and uses.

Earlier Assignment Distribution: Provide the assignment earlier in the semester so students can document plants while they are still alive and in active growth, rather than dormant.

Application to Real-World Context: Have students take it a step further by integrating their plant knowledge into a production calendar or garden plan, applying what they've learned to real agricultural scenarios.

AGRI 130: Animal Science

Focus on Disease Prevention and Production Calendar: Since students struggled with planning disease prevention and creating a production calendar, more focused instruction is needed in these areas.

Provide additional practice scenarios or examples to help students better understand how to create and implement a disease prevention plan.

Offer guidelines and templates for creating production calendars to help students visualize the process and understand its real-world application.

Incorporate more interactive exercises and check-ins to ensure students can effectively apply these concepts throughout the course.

These adjustments aim to improve student understanding by emphasizing quality over quantity in assignments and providing more focused support in areas where students struggle most.

What is the proposed timeline for the changes outlined above?

AGRI 120- Have tool redesigned by Oct 15, 2024.

AGRI 130- Lesson revision and giving better examples of the concepts not met by Nov 1, 2024.

Additional Summary Notes

Anomalies in the results that were noticed:

F2F students in AGRI 120 had 9 not submit assignment or attempt it.

Program Outcomes Rubric

PLO #3 Form technical knowledge and professional skills in relation to agriculture industries.

Competency Areas	I	II	III	IV
	Fails to demonstrate knowledge or skills.	Demonstrates rudimentary knowledge and general skills	Demonstrates knowledge and skills sufficient to perform general technical operations.	Demonstrates knowledge and skills sufficient to perform complex technical operations.

Program Outcome # 3

Form Technical knowledge and professional skills in relation to agriculture industries.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 270	Ag Systems Management	1	8	1 section of 8 students	1	Yes

		I	II	III	IV	Total # of Students
Course Agri 270 Ag Systems Tech	#			3	5	8
	%			38%	62%	

Assessment Results

Outcome #3: *Form technical knowledge and professional skills in relation to agricultural industries.*

AGRI 270: Agricultural Systems Management

Task: Students discussed various agricultural equipment, ranging from simple machines to complex internal combustion engines.

Results:

- **38%** of students achieved *Level 3*, demonstrating a solid understanding of the equipment and its applications in agriculture.
- **62%** of students achieved *Level 4*, indicating a higher level of mastery and technical understanding of the equipment discussed.

Analysis

Strong Performance: The majority of students (62%) reached *Level 4*, reflecting strong technical knowledge and understanding.

Opportunity for Growth: While 38% of students performed well at *Level 3*, there is room for improvement in this group to elevate their understanding to the highest level.

Students are struggling to meet both the knowledge and skills components required to achieve *Level 3*. While they may have successfully completed the lab portion of the course, they often fall short in the application of reflection or journal aspects of the measurement tool, or vice versa.

By ensuring that both the knowledge and skills components are addressed simultaneously and by providing clearer guidance and structured support, students will be better positioned to succeed in achieving *Level 3* and progressing toward *Level 4*.

Use of Results for Improvement

Briggs & Stratton's partnership will provide upgraded engines for AGRI 270 labs by January 15th, 2025 ensuring students can effectively complete practical tasks. Previously, the campus engines were missing or damaged parts, preventing students from fully disassembling and reassembling them to test if they could run properly. While students were able to identify parts during disassembly, they missed the crucial step of reassembly and testing. To address this,

the updated engines will support the full process, including making them operational. Additionally, structured journal checkpoints will be introduced to promote accountability and reinforce the application of theoretical knowledge throughout the lessons.

What is the proposed timeline for the changes outlined above?

Reaching out to Briggs for new motors to utilize for class Jan 15, 2025

Journal and check in dates set prior to the syllabus- Jan 1, 2025

Program Outcomes Rubric

PLO #4 Demonstrate written and verbal communication to effectively work in agricultural professions.

Competency Areas	I	II	III	IV
	Fails to identify most relevant information and fails to organize it for effective use in agriculture contexts.	Fails to identify most relevant information or fails to organize it for effective use in agriculture contexts.	Organize and deliver critical information using correct terminology that demonstrates thorough understanding in agriculture contexts. But fails to use appropriate terminology or uses the terminology incorrectly.	Effectively communicates critical information using correct terminology that demonstrates thorough understanding in agriculture contexts.

Program Outcome #4

PLO #4 Demonstrate written and verbal communication to effectively work in agricultural professions

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
AGRI 130	Animal Science	2	32	1 section with 16	1	Yes

		I	II	III	IV	Total # of Students
Course AGRI 130 Animal Science	#	0	0	15	11	26
	%			58%	42%	

Assessment Results

Program Learning Objective #4: *Demonstrate written and verbal communication skills to effectively work in agricultural professions.*

- **42%** of students achieved *Level 4*, indicating a high level of proficiency in both written and verbal communication skills.
- **58%** of students achieved *Level 3*, demonstrating a solid understanding of communication but with room for improvement in certain areas.

Analysis

Key areas for improvement include reinforcing proper terminology in animal science courses, particularly for online students, and enhancing record-keeping skills. These aspects are essential for students to succeed in both theoretical understanding and practical application within the field.

Use of Results for Improvement

The grading rubric has been enhanced with improved examples and terminology, emphasizing the critical role of record-keeping in agriculture alongside the assignment. During the review of objective changes, it became clear that a new Program Outcome needs to be incorporated for FY2025: *"Maintain records and perform calculations relevant to contemporary agricultural systems."*

What is the proposed timeline for the changes outlined above?

Steps in terminology added to rubric- October 1, 2024

Importance of record keeping and samples to use in process with the livestock Electronic ID system being utilized for F2F students and will be used as sample for the online students- Oct 15, 2024.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 2022-2023 SLO report. (Use as many pages as necessary to describe.)

Changes in the curriculum would be grid changes for 23-24 year:

- Add certificate option by aligning those classes to be completed 1st year to improve enrollment and retention.
- AGRI 234: Course Deletion
- AGRI 232: Course Deletion
- GIS 120 Introduction to Geographic Information Systems - Deletion of Course - Course no longer being used in any programs.
- TRNS 105: Course Deletion.
- Agriculture Equipment Technician - New One-Year Certificate - Agriculture Equipment Technicians are needed in the region. This one-year certificate will prepare students for tech positions to fulfill that need.

With low enrollment building a different direction for the program was looked at. Changes in the curriculum would be grid changes for 24-25 year:

- AETC 115 - Fundamentals of Agriculture Equipment - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 116 - Electrical Systems I - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 117 - Diesel Systems I - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 118 - Hydraulic Systems - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 125 - HVAC Systems - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 126 - Electrical Systems II - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 127- Diesel Systems II - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.
- AETC 128 - Power Trains - New Course This is a new course that is part of new Agriculture Equipment Technician one-year certificate. The certificate meets employer needs in the region.

(2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

- Introducing a one-year certificate option for the first year has provided students with a valuable credential, allowing those who might leave for job opportunities to still earn a certificate before departing.
- The CDL component of the course was removed to support enrollment efforts. Many students faced challenges with the time commitment required for the CDL portion and expressed apprehension about the course, which impacted their decision to enroll.



THREE RIVERS COLLEGE

Behavioral Health Support

Program Level SLO Report

Corey Reynolds

2023 - 2024

Program Purpose Statement

Listed as the program purpose statement in the catalog and listed as the Program Description on the program webpage:

Career and Technical Education. The Behavioral Health Support curriculum is designed to prepare students for entry-level positions in state, county, and local human service agencies. Graduates will incorporate the learned skills and attributes in order to collaborate with mental health professionals and interact with clients with behavioral and mental health diagnoses.

Listed as the program purpose statement on the program webpage:

The Associate of Applied Science in Behavioral Health Support (BHS) program prepares students for entry-level employment in the behavioral healthcare field upon successful completion. The program curriculum is designed to develop and enhance the student's cultural competency and ethical practice while promoting respect for others, appreciation of individual differences, and compassion. Students will learn about the interconnectedness of the helping fields as well as how to recognize the co-occurring risk factors of mental health and behavioral health while developing self-awareness, self-reliance, and self-confidence. The Behavioral Health Support Program prioritizes implementation of client-centered tailored treatment planning to support competent and ethical case management/care coordination.

Program Outcomes

- Practice culturally sensitive care with the appropriate standards of ethics within the helping fields.
- Evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.
- Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.
- Implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Behavioral Health Support: Program Outcomes Mapping

Program Outcome 1:	
Practice culturally sensitive care with the appropriate standards of ethics within the helping fields.	
Course	Course Learning Outcome (CLO)
BHS 206 Introduction to Behavioral Health Support	Articulate the roles and functions of behavioral health support workers.
	Identify the historical barriers as well as current practices of behavioral healthcare workers.
	Demonstrate the strategies involving policy interventions and advocacy in the practice of behavioral health.
BHS 208 Legal and Ethical Issues	Identify client rights as they relate to treatment and the boundaries regarding treatment plans and interactions between client and provider.
	Describe the ethical, professional standards and boundaries regarding the relationship between client and professional.
	Discuss legal and court issues that are often correlated with mental health concerns such as substance use, custody, domestic violence, and access to care.
	Distinguish between confidentiality and mandated reporting.
BHS 215 Wellness Coaching	Define health and wellness.
	Use the wellness coaching process to change behavior.

	Use effective communication and motivational enhancement skills.
	Describe the importance of teamwork and collaboration as part of the wellness coaching process.
BHS 216 Systems of Care Support	Identify ways to locate and deliver community resources to a diverse client population, employing sensitivity to culture and how the differences in cultural norms relate to how clients seek and receive community resources.
	Explain how community resources are impacted by economics and politics.
	Identify and differentiate the various means tests utilized by a variety of community resources.
	Identify the various roles/importance of community volunteers.
	Describe the goals and functions of various community resources.
BHS 225 Substance Use Disorders	Explain chemical addiction and dependency including the cycle of addiction.
	Define and utilize terminology related to the field of chemical dependency and recovery.
	Identify social and personal factors which influence chemical addiction and dependency and recovery.
	List various types of addictive chemicals and resulting behaviors and indicators of abuse.
BHS 227 Diagnosis of Identified Populations	Explore how licensed mental health make DSM-5 diagnoses and describe the associated assessment tools.
	Describe identified DSM-5 diagnoses and list the diagnostic criteria for each.
	Describe risk and protective factors associated with each of the identified DSM-5 Diagnoses.
	Explore symptom recognition and management.
BHS 229 Conflict Resolution	Define interpersonal conflict, discuss how interpersonal conflicts develop, and discuss theories for managing interpersonal conflicts.

	Define intrapersonal conflicts, discuss how intrapersonal conflicts develop, and discuss theories for managing intrapersonal conflicts.
	Describe the characteristics of a mental health crisis situation and any unique challenges that may be present given different client populations.
	Describe models of crisis intervention and response.
	Demonstrate basic crisis intervention skills including listening, acting, and assessing.
BHS 236 Evidence-Based Treatment	Articulate the role of evidence-based approaches in a behavioral healthcare setting.
	Identify the more commonly used evidence-based approaches used throughout the behavioral healthcare field.
	Demonstrate an understanding of the importance of evidence-based approaches.
	Demonstrate effective written communications in behavioral healthcare practice.
BHS 295 Behavioral Health Support Clinical Practicum I	Demonstrate the skills and competencies of a behavioral health support worker.
	Apply ethical principles to guide practice.
	Use behavior modification, motivational interviewing, and wellness coaching techniques to change client behavior.
	Prepare reports using appropriate documentation and protocols.
BHS 296 Behavioral Health Support Clinical Practicum II	Demonstrate the skills and competencies of a behavioral health support worker.
	Apply ethical principles to guide practice.
	Use behavior modification, motivational interviewing, and wellness coaching techniques to change client behavior.
	Prepare reports using appropriate documentation and protocols.

Program Outcome 2:

Evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.

Course	Course Learning Outcome (CLO)
BHS 206 Introduction to Behavioral Health Support	Articulate the roles and functions of behavioral health support workers.
	Identify the historical barriers as well as current practices of behavioral healthcare workers.
	Demonstrate the strategies involving policy interventions and advocacy in the practice of behavioral health.
	Demonstrate effective written communications in behavioral healthcare practice.
BHS 208 Legal and Ethical Issues	Identify client rights as they relate to treatment and the boundaries regarding treatment plans and interactions between client and provider.
	Describe the ethical, professional standards and boundaries regarding the relationship between client and professional.
	Discuss legal and court issues that are often correlated with mental health concerns such as substance use, custody, domestic violence, and access to care.
BHS 215 Wellness Coaching	Define health and wellness.
	Define the eight wellness dimensions and examine the value of the strength's perspective.
	Use effective communication and motivational enhancement skills.
	Discuss health topics with clients.
	Describe the importance of teamwork and collaboration as part of the wellness coaching process.
BHS 216 Systems of Care Support	Apply a referral process to broker community resources from a variety of human service agencies.
	Identify ways to locate and deliver community resources to a diverse client population, employing sensitivity to culture and how the differences

	in cultural norms relate to how clients seek and receive community resources.
	Explain how community resources are impacted by economics and politics.
	Identify and differentiate the various means tests utilized by a variety of community resources.
	Identify the various roles/importance of community volunteers.
	Describe the goals and functions of various community resources.
	Describe the eligibility requirements of community resources.
BHS 225 Substance Use Disorders	Define and utilize terminology related to the field of chemical dependency and recovery.
	Identify social and personal factors which influence chemical addiction and dependency and recovery.
	Describe various comprehensive substance abuse treatment and rehabilitation models.
	List various types of addictive chemicals and resulting behaviors and indicators of abuse.
BHS 229 Conflict Resolution	Define intrapersonal conflicts, discuss how intrapersonal conflicts develop, and discuss theories for managing intrapersonal conflicts.
	Describe the characteristics of a mental health crisis situation and any unique challenges that may be present given different client populations.
	Describe models of crisis intervention and response.
	Demonstrate basic crisis intervention skills including listening, acting, and assessing.
BHS 236 Evidence-Based Treatment	Articulate the role of evidence-based approaches in a behavioral healthcare setting.
	Identify the more commonly used evidence-based approaches used throughout the behavioral healthcare field.
	Demonstrate an understanding of the importance of evidence-based approaches.

	Demonstrate effective written communications in behavioral healthcare practice.
BHS 295 Behavioral Health Support Clinical Practicum I	Demonstrate the skills and competencies of a behavioral health support worker.
	Prepare reports using appropriate documentation and protocols.
BHS 296 Behavioral Health Support Clinical Practicum II	Demonstrate the skills and competencies of a behavioral health support worker.
	Apply ethical principles to guide practice.
	Prepare reports using appropriate documentation and protocols.

Program Outcome 3:	
Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.	
Course	Course Learning Outcome (CLO)
BHS 206 Introduction to Behavioral Health Support	Articulate the roles and functions of behavioral health support workers.
	Identify the historical barriers as well as current practices of behavioral healthcare workers.
	Demonstrate the strategies involving policy interventions and advocacy in the practice of behavioral health.
BHS 208 Legal and Ethical Issues	Identify client rights as they relate to treatment and the boundaries regarding treatment plans and interactions between client and provider.
	Describe the ethical, professional standards and boundaries regarding the relationship between client and professional.
	Discuss legal and court issues that are often correlated with mental health concerns such as substance use, custody, domestic violence, and access to care.
BHS 215 Wellness Coaching	Define health and wellness.
	Define the eight wellness dimensions and examine the value of the strength's perspective.
	Use the wellness coaching process to change behavior.

	Discuss health topics with clients.
BHS 216 Systems of Care Support	Describe the goals and functions of various community resources.
	Describe the eligibility requirements of community resources.
BHS 225 Substance Use Disorders	Explain chemical addiction and dependency including the cycle of addiction.
	Define and utilize terminology related to the field of chemical dependency and recovery.
	Identify social and personal factors which influence chemical addiction and dependency and recovery.
	Describe various comprehensive substance abuse treatment and rehabilitation models.
	List various types of addictive chemicals and resulting behaviors and indicators of abuse.
BHS 227 Diagnosis of Identified Populations	Explore how licensed mental health makes DSM-5 diagnoses and describe the associated assessment tools.
	Describe identified DSM-5 diagnoses and list the diagnostic criteria for each.
	Describe risk and protective factors associated with each of the identified DSM-5 Diagnoses.
	Explore symptom recognition and management.
BHS 229 Conflict Resolution	Define interpersonal conflict, discuss how interpersonal conflicts develop, and discuss theories for managing interpersonal conflicts.
	Define intrapersonal conflicts, discuss how intrapersonal conflicts develop, and discuss theories for managing intrapersonal conflicts.
	Describe the characteristics of a mental health crisis situation and any unique challenges that may be present given different client populations.
	Describe models of crisis intervention and response.
	Demonstrate basic crisis intervention skills including listening, acting, and assessing.
	Articulate the role of evidence-based approaches in a behavioral healthcare setting.

BHS 236 Evidence-Based Treatment	Identify the more commonly used evidence-based approaches used throughout the behavioral healthcare field.
	Demonstrate an understanding of the importance of evidence-based approaches.
	Demonstrate effective written communications in behavioral healthcare practice.
BHS 295 Behavioral Health Support Clinical Practicum I	Demonstrate the skills and competencies of a behavioral health support worker.
	Apply ethical principles to guide practice.
	Use behavior modification, motivational interviewing, and wellness coaching techniques to change client behavior.
	Prepare reports using appropriate documentation and protocols.
BHS 296 Behavioral Health Support Clinical Practicum II	Demonstrate the skills and competencies of a behavioral health support worker.
	Apply ethical principles to guide practice.
	Use behavior modification, motivational interviewing, and wellness coaching techniques to change client behavior.
	Prepare reports using appropriate documentation and protocols.

Program Outcome 4:

Implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.

Course	Course Learning Outcome (CLO)
BHS 206 Introduction to Behavioral Health Support	Articulate the roles and functions of behavioral health support workers.
	Identify the historical barriers as well as current practices of behavioral healthcare workers.
	Demonstrate effective written communications in behavioral healthcare practice.
BHS 208 Legal and Ethical Issues	Identify client rights as they relate to treatment and the boundaries regarding treatment plans and interactions between client and provider.

	Distinguish between confidentiality and mandated reporting.
BHS 215 Wellness Coaching	Use effective communication and motivational enhancement skills.
BHS 216 Systems of Care Support	Apply a referral process to broker community resources from a variety of human service agencies.
BHS 225 Substance Use Disorders	Define and utilize terminology related to the field of chemical dependency and recovery.
BHS 236 Evidence-Based Treatment	Demonstrate effective written communications in behavioral healthcare practice.
BHS 295 Behavioral Health Support Clinical Practicum I	Demonstrate the skills and competencies of a behavioral health support worker.
	Prepare reports using appropriate documentation and protocols.
BHS 296 Behavioral Health Support Clinical Practicum II	Demonstrate the skills and competencies of a behavioral health support worker.
	Prepare reports using appropriate documentation and protocols.

Introduction

The processes and artifacts that have been developed and cultivated to produce the data presented in this report have been refined through trial and error and experimentation. Classroom observations and tracked progress of program students also largely impacted the development of artifacts. The artifacts were developed to align with industry standards and expectations. The structures and process of practicum requirements have been adjusted and further developed to produce more authentic results. The work that has been done to develop assessment instruments was produced through collaboration with Three Rivers leadership and community partners. I appreciate all the advice and direction I have been given during this process as well as for the privilege to create artifacts and processes that I am confident will continue to produce substantive, authentic, and actionable data.

The program manager aimed for students to articulate their understanding of the interplay between substance use and mental health. In the artifact assigned at the conclusion of BHS 225, students demonstrate their insight regarding the effects of substance use on mental health. Similarly, the artifact at the end of BHS 227 allows students to express their understanding of how mental illness can affect substance use. Furthermore, the final artifact for BHS 229 requires students to explain their approach to assessing and initiating stabilization in a crisis situation. Each of these artifacts is designed to evaluate the relevant program learning outcomes, ensuring the success of the program.

The practicum placement process has been designed to enhance student accountability in fulfilling their practicum requirements. BHS students are tasked with selecting a cooperating agency, completing the agency's application process, and participating in the agency's interview process for placement. This approach facilitates the development of respectful relationships between students and cooperating agencies, while also ensuring

optimal placement outcomes. BHS students receive evaluations at both the midterm and conclusion of each practicum semester from a representative of the supervising agency. These evaluations include multiple sections and questions to assess student performance comprehensively.

Program Outcomes Rubric

Outcomes	I	II	III	IV
Practice culturally sensitive care with the appropriate standards of ethics within the helping fields.	Fails to practice culturally sensitive care with the appropriate standards of ethics within the helping fields.	Attempts to practice culturally sensitive care with the appropriate standards of ethics within the helping fields.	Regularly observes culturally sensitive care with the appropriate standards of ethics within the helping fields.	Practices culturally sensitive care with the appropriate standards of ethics within the helping fields.
Evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.	Fails to evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.	Attempts to evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.	In most situations, evaluates the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.	Evaluates the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.
Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.	Fails to examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.	Attempts to examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.	In most situations, examines the relationship between behavioral health disorders and mental health disorders along with their risk factors.	Examines the relationship between behavioral health disorders and mental health disorders along with their risk factors.
Implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.	Fails to implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.	Attempts to implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.	Regularly implements tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.	Implements tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.

Program Outcome 1

Outcome Description

Practice culturally sensitive care with the appropriate standards of ethics within the helping fields.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
225	Substance Use Disorders	1	10	0	1 FT	yes
227	Diagnosis of Identified Populations	1	10	0	1 FT	yes
229	Conflict Resolution	1	10	0	1 FT	yes
295	Practicum I	1	10	0	1 FT	yes
296	Practicum II	1	10	0	1 FT	yes

Results:

			I	II	III	IV	Total # of Students
BHS 225	#		0	2	2	6	10
	%			20%	20%	60%	
BHS 227	#		3	1	0	6	10
	%		30%	10%		60%	
BHS 229	#		1	1	0	8	10
	%		10%	10%	10%	80%	
Fall 2023 BHS 295 Midterm	#		0	0	4	6	10
	%				40%	60%	
Fall 2023 BHS 295 Final	#		0	0	5	5	10
	%				50%	50%	
	#		0	2	2	6	10

Spring 2024 BHS 296 Midterm		%		20%	20%	60%	
Spring 2024 BHS 296 Final		#	1	0	1	8	10
		%	10%		10%	80%	

- The data showed that students were weakest in practicing culturally sensitive care, compared to other outcomes.

Analysis

For a behavioral health professional to be able to practice culturally sensitive care they have to have secure self-identity and solid understanding of their own culture which leads to appreciation of their own diversity. Culturally sensitive care is a professional and ethical standard that is of constant focus in the helping fields and clinicians are required to continuously cultivate and practice culturally sensitive care. This is often something clinicians struggle with depending on their own experience level with multicultural diversity. The behavioral health professional has to recognize where they come short in their own understanding of their client's culture and ethically seek education and understanding of client cultural needs. This of course happens progressively over time, making the behavioral health professional more skilled at recognizing cultural diversity and the needs that require unique resources based on client cultural diversity.

Based on class discussions and assignments where the students examined their own culture and their own diversity, it is my observation that students didn't lack the fundamental necessities of self-actualization and self-awareness. Students improved on this standard as they progressed through their practicum requirements and as they became more

exposed to multicultural diversity and how to approach it in practice. A strong emphasis on practicing values management and ethical bracketing, as to not engage in transference and countertransference, is also strongly emphasized throughout programmatic curriculum and initiatives. This helps to build a resistance against ethical boundary crossings and violations as professionals support client rights to autonomy and self-determination. As students gain more understanding of the value of cultural competency, they realize that culture is something that is seen throughout various aspects of society and their definition of culturally sensitive care broadens.

Comparing final practicum evaluations from fall 2023 to spring 2024 students showed improvement in practicing culturally sensitive care. Practicum evaluation results demonstrated that BHS students were growing in applying fundamental ethical principles to real world practice. The results documented on practicum evaluations demonstrated that students were learning how to develop a solid ethical foundation including cultural sensitivity.

Use of Results for Improvement

BHS 208: Legal and Ethical Issues will continue to be a required course for the BHS Program and careful consideration will be applied to the ongoing cultivation of the course to assure relevant content. Students will continue to be encouraged to foster cultural sensitivity to assure ethical practice and ethical service delivery. Course and programmatic content will continue to aim to expose students to culturally diverse situations in order to prepare them for real world practice.

Program Outcome 2

Outcome Description

Evaluate the interconnectedness of the helping fields to include mental healthcare, behavioral healthcare, and human services for the purpose of patient/client-centered advocacy.

Results

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
225	Substance Use Disorders	1	10	0	1 FT	yes
227	Diagnosis of Identified Populations	1	10	0	1 FT	yes
229	Conflict Resolution	1	10	0	1 FT	yes
295	Practicum I	1	10	0	1 FT	yes
296	Practicum II	1	10	0	1 FT	yes

		I	II	III	IV	Total # of Students
BHS 225	#	1	0	0	9	10
	%	10%			90%	
BHS 227	#	1	0	0	9	10
	%	10%			90%	
BHS 229	#	2	2	1	5	10
	%	20%	20%	10%	50%	
	#	0	0	4	6	10

Fall 2023 BHS 295 Midterm	%			40%	60%	
Fall 2023 BHS 295 Final	#	0	0	5	5	10
	%			50%	50%	
Spring 2024 BHS 296 Midterm	#	0	2	2	6	10
	%		20%	20%	60%	
Spring 2024 BHS 296 Final	#	1	0	1	8	10
	%	10%		10%	80%	

Analysis

Initially, students struggled with understanding the interconnectedness of the helping fields. Through constant exposure of tailored treatment planning during practicum requirements students gained a stronger understanding of the interconnectedness of the helping fields observing clients' needs linked to relevant resources. Students also observed multiple treatment teams that were made up of diverse helping professionals to assist clients in reaching their goals of their tailored treatment plans, broadening the students' perspectives of the helping industry.

Use of Results for Improvement

Students will continue to shadow behavioral health professionals and will continue to be coached during interactions with diverse helping professionals during their practicum requirements. Students will continue to be encouraged to attend community events where they can network with diverse helping agencies and helping professionals to build necessary relationships and knowledge bases for relevant resources to link their future clients' needs to.

Program Outcome 3

Outcome Description

Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.

Results

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
225	Substance Use Disorders	1	10	0	1 FT	yes
227	Diagnosis of Identified Populations	1	10	0	1 FT	yes
229	Conflict Resolution	1	10	0	1 FT	yes
295	Practicum I	1	10	0	1 FT	yes
296	Practicum II	1	10	0	1 FT	yes

		I	II	III	IV	Total # of Students
BHS 225	#	0	0	0	10	10
	%				100%	
BHS 227	#	0	0	0	10	10
	%				100%	
BHS 229	#	1	4	0	5	10
	%	10%	40%		50%	
Fall 2023 BHS 295 Midterm	#	0	0	4	6	10
	%			40%	60%	

Fall 2023 BHS 295 Final	#	0	0	5	5	10
	%			50%	50%	
Spring 2024 BHS 296 Midterm	#	0	2	2	6	10
	%		20%	20%	60%	
Spring 2024 BHS 296 Final	#	1	0	1	8	10
	%	10%		10%	80%	

In BHS 225: Substance Use Disorders and in BHS 227: Diagnosis of Identified Populations students were given a similar assignment as a final course paper. Both of these artifacts assessed the students understanding of dual diagnosis/co-occurring disorders. In BHS 225 students were required to discuss how substance use disorders (SUDs) impacted mental health disorders and in BHS 227 students were required to discuss how mental health disorders impact substance use disorders (SUDs). According to the data the students had a strong understanding of co-occurring disorders and understood the interconnectedness of dual diagnosis/co-occurring disorders. The data also showed that students had an overall solid understanding of interconnectedness of the helping fields and how to relate that knowledge to linking clients to relevant resources to focus on a holistic and client-centered approach.

Analysis

The case study collected in BHS 229 showed students struggled with maintaining a focus on examining how mental illness and/or substance use disorder can contribute to crisis or how crisis can escalate mental illness and/or substance use disorder.

According to the artifacts collected in BHS 225 and BHS 227 students excelled in understanding cooccurring disorders. The cohort demonstrated a solid level of understanding how mental illness can impact substance use and how substance use can impact mental illness.

Use of Results for Improvement

An emphasis on cooccurring disorders will continue to be of strong priority as BHS students will continue to be exposed to the nature of cooccurring disorders. Students will continue to gain firsthand experience with clients suffering from mental illness, substance use disorder (SUD), and cooccurring disorders. Course curriculum will continue to align with practicum benchmarks and expectations to promote real world application and professional skill development appropriate for working within a behavioral health agency.

1. Further define PLO #3 to offer a more substantial and well-defined definition of the purpose to the PLO. Proposed change below:
 - a. Current: *Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.*
 - b. Proposed: *Examine the relationship between substance use disorders and mental health disorders along with their risk factors.*

Timeline

1. Further define PLO #3 to offer a more substantial and well-defined definition of the purpose to the PLO.

As of Spring 2025, curriculum paperwork has been completed and submitted.

Program Outcome 4

Outcome Description

Implement tailored treatment plans to include appropriate helping responses for individuals in mental health crisis and/or with suicidal ideation to bring about crisis stabilization.

Results

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
225	Substance Use Disorders	1	10	0	1 FT	yes
227	Diagnosis of Identified Populations	1	10	0	1 FT	yes
229	Conflict Resolution	1	10	0	1 FT	yes
295	Practicum I	1	10	0	1 FT	yes
296	Practicum II	1	10	0	1 FT	yes

		I	II	III	IV	Total # of Students
BHS 225	#	0	1	1	8	10
	%		10%	10%	80%	
BHS 227	#	0	0	0	10	10
	%				100%	
BHS 229	#	2	0	0	8	10
	%	20%			80%	
Fall 2023 BHS 295 Midterm	#	0	0	4	6	10
	%			40%	60%	

Fall 2023 BHS 295 Final	#	0	0	5	5	10
	%			50%	50%	
Spring 2024 BHS 296 Midterm	#	0	2	2	6	10
	%		20%	20%	60%	
Spring 2024 BHS 296 Final	#	1	0	1	8	10
	%	10%		10%	80%	

- The data showed that collectively students were strong in understanding how to develop a tailored treatment plan.

Analysis

Since developing tailored treatment plans is a primary responsibility for care coordinators and case managers program curriculum and course assignments focus on building skills that are related to tailored treatment planning. Students are expected to not only gain a strong skillset in this area but are also expected to focus on learning to cultivate those skills. Students are exposed to all aspects of treatment planning during their practicum requirements where they gain firsthand experience engaging in the treatment planning process. By the end of their second practicum semester students should be well familiar with how to develop tailored treatment plans.

By the end of the final practicum 90% of the cohort showed improvement in achieving practicum evaluation benchmarks. Overall, the cohort demonstrated the developing ability to maintain a person-centered, client-centered approach in practice including tailored treatment planning.

Use of Results for Improvement

Continuing to facilitate a student-centered approach to practicum placement and experience allowing for autonomous decision-making and self-led professional development. Continue to encourage students to engage in increasing self-awareness and skill development as they journey through discovering their strengths and areas of improvement as behavioral health professionals. Continue to cultivate a culture within cohorts that embraces, accepts, and appreciates failures as teachable moments and experiences. Practicums will continue to expose BHS students to the diverse facets of treatment planning processes so they can gain firsthand experience and training that will help them to better conceptualize the full value of tailored treatment planning.

Additional Summary Notes

Practicum Field Evaluations Results:

- Fall 2023 Midterm:
 - 4 students scored 3.
 - 6 students scored a 4.
- Fall 2023 Final:
 - 5 students scored a 3.
 - 5 students scored a 4.
 - 1 student regressed at final.
- Spring 2024 Midterm:
 - 2 students scored a 2.
 - 2 students scored a 3.
 - 6 students scored a 4.
- Spring 2024 Final:
 - 1 student scored a 1.
 - 1 student scored a 3.
 - 8 students scored a 4.
- Comparison of midterm Spring 2024 to final 2023
 - 1 student progressed from a score of 3 to a 4.
 - 2 students regressed to a score of 2 from a 3.
- Comparison of final Fall 2023 to final Spring 2024
 - 3 students made progress and improved their scores at final from Fall 2023 compared to the final evaluation Spring 2024
 - 1 student remained at a 3 not improving to a 4.
 - 1 student regressed to scoring a 1 at final Spring 2024

Use of Results for Improvement

1. Evaluate how the implementation of the BHS Program Handbook may have impacted PLOs.

2. Do not look at the artifact(s) first. Look at lesson planning that leads to the artifact(s) and make changes accordingly. Document the changes made to the approaches taken.
3. Set a benchmark or benchmarks and compare and contrast results. Compare and contrast students and cohorts. Apply multiple routes of analysis.
4. Further define PLO #3 to offer a more substantial and well-defined definition of the purpose to the PLO.
 - a. "Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors."
 - b. Examine the relationship between substance use disorders and mental health disorders along with their risk factors

What is the proposed timeline for the changes outlined above?

1. Evaluate how the implementation of the BHS Program Handbook may have impacted PLOs.
 - a. Spring 2024 – collect student feedback concerning the handbook and its effectiveness in preparing students for program requirements and expectations.
 - b. Use feedback to adjust accordingly.
2. Don't look at the artifact(s) first. Look at lesson planning that leads to the artifact(s) and adjust accordingly. Document the changes made to the approaches taken.
 - a. Ongoing – assess the relevance of the artifacts and the data they are generating.
 - b. Ongoing - assess the originality and authenticity of the data.
3. Moving forward the program manager will systematically document the overall performance of the cohort based on the data generated from the collected artifacts. Additionally, the program manager will monitor and record both improvements and areas needing enhancement by analyzing and comparing cohort performances. This process will aid the program manager in identifying opportunities for improvement within the program curriculum and the artifacts used to evaluate program learning outcomes.

4. Further define PLO #3 to offer a more substantial and well-defined definition of the purpose to the PLO.
 - a. Current: Examine the relationship between behavioral health disorders and mental health disorders along with their risk factors.
 - b. Proposed: Examine the relationship between substance use disorders and mental health disorders along with their risk factors.
 - i. Curriculum paperwork has been completed and submitted.

Anomalies in the results that were noticed:

- One student moved from a 3 to a 1 in their final student practicum evaluation showing massive regression while their peers showed consistent improvement. Concerning the students that regressed to scoring a 1, on their final evaluation Spring 2024 it is my understanding that it was due to poor performance. As the instructor I spoke with both the student and the agency representative to gain understanding and assess what happened. Based on the little information I was given by both and what I was able to understand I believe that the student had made an error that harmed their standing with the agency's program. This proved to be damaging to the students' overall understanding of the agency. Neither the student nor the agency was forthcoming with any strong details as to what caused the decline in the students' overall evaluation and standing. I was not made aware of anything that warranted formal disciplinary action or that raised any concern(s) academically. The student graduated in May 2024 with the goal to work for another agency in their area.
- Academically, students showed a strong understanding of tailored treatment planning but initially during practicum requirements showed a disconnect in the academic understanding and practical application.

- When comparing and contrasting data collected from artifacts assigned during BHS 225, BHS 227, and BHS 229 students had a stronger understanding of practicing culturally sensitive care during crisis situations compared to when encountering dual diagnosis/co-occurring disorders.
- When comparing and contrasting data collected from artifacts assigned during BHS 225, BHS 227, and BHS 229 students had a weaker understanding of dual diagnosis/co-occurring disorders when assessed during a crisis situation or how crisis situations can impact dual diagnosis/co-occurring disorders.
- When comparing and contrasting data collected from artifacts assigned during BHS 225, BHS 227, and BHS 229 students had a weaker understanding of interconnectedness of the helping fields when assessed during a crisis situation.
- As mentioned previously, the artifact assigned in BHS 225 and BHS 227 are similar which are course papers assessing the academic understanding of students. The artifact assigned during BHS 229: Conflicts Resolution is a case study focusing more on practical application(s). Students struggled with the practical application aspect, I believe largely due to a lack of confidence in their own skills and abilities. Students are often intimidated by moving from a mere academic understanding to practical application. I have seen this evidence consistently as cohorts prepare to enter their practicum semesters.

Were there any patterns in the data observed?

Overall, the data showed that the student improvement and progression. Data showed that students gained the skills needed to enter the workforce successfully upon graduation with a stronger understanding and concept of essential fundamental principles needed to thrive as a behavioral health professional. Students were successful in moving from a mere academic understanding of key concepts to solid practical applications.

Addendum

Program Name: Behavioral Health Support

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 20XX-XX SLO report. (Use as many pages as necessary to describe.)

The program transitioned to a fully online modality which I believe had many positive attributes including accommodating the schedules of students especially during their practicum semesters. Moving fully online has granted students more autonomy in developing scheduling that meets and accommodates their own needs and has freed up time for students to continue to focus on the responsibilities of their jobs, families, and practicum requirements. Time management is a necessary skill that the students need to develop and will utilize continuously when entering the workforce. The program moving to a fully online modality has helped to promote and encourage a stronger work/school-life balance for the students. Completing the 315 required practicum hours successfully is a top priority for BHS students that triggers intense anxiety for the students and lifting the face-to-face attendance requirements helped to alleviate some of the anxiety students experienced.

- Evaluate how change in modalities may have impacted the PLOs.
 - Evaluate how the implementation of the BHS Program Orientation may have impacted PLOs.
 - Results from practicum student evaluations.
- Evaluate how the implementation of the BHS Program Handbook may have impacted PLOs.
 - Took out the scoring of 5 for a 1-4 scale to better reflect the PLO rubric and maintain consistency.

- Took out the scoring of “poor” to better reflect the PLO rubric and maintain consistency.
- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

This shift to a fully online modality has caused the partnering agencies to be solely responsible for training the students and exposing them to the diverse facets of field interactions. Moving fully online requires students to learn vital skills necessary to be the self-starters their positions will require them to be. This transition is encouraging students to be more independent and autonomous problem solvers and critical thinkers as they are now empowered to take more of the responsibility in managing their academic responsibilities.



THREE RIVERS COLLEGE

Criminal Justice - AAS

Program Level SLO Report

Shawn Westbrooks – Program Manager

2023-2024

Program Purpose Statement

The Associate of Applied Science Criminal Justice program options prepare individuals for a career in law enforcement and police work. In addition to courses concerned primarily with the activities of police on the operational level, the curriculum includes the legal, social, and philosophical basis for law enforcement. This program is applicable to both the pre-service and the in-service officer.

Program Outcomes

1. Differentiate Constitutional Amendments.
2. Recognize the impact that significant Supreme Court rulings have on law enforcement.
3. Identify a violation of Missouri law based on a description of an action.
4. Identify legal terminology and procedures used within the criminal justice system.
5. Distinguish philosophical eras, sociological theories, and significant historic events impacting law enforcement.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Criminal Justice: Program Outcomes Mapping

Program Outcome 1:	
Differentiate Constitutional Amendments.	
Course	Course Learning Outcome (CLO)
ADJU 100: Introduction to Law Enforcement	Describe the early history and development of law enforcement agencies (CLO 1)
	Identify the role and functions of various agencies (CLO 2)
	Recognize the basic tasks and styles of policing (CLO 3)
	Outline the basic legal restrictions on law enforcement (CLO 4)
	Describe the fundamental principles of social control (CLO 5)
ADJU-102: Introduction to Criminal Justice	Review the foundations of the criminal justice system (CLO 1)
	Examine the role and function of police (CLO 2)
	Identify the structure and purpose of the court system (CLO 3)
	Recognize the functions of jails, prisons, and community supervision (CLO 4)
	Identify crime prevention techniques and theories (CLO 5)
ADJU 114: Constitutional Law	Describe the basic legal principles of the U.S. Constitution (CLO 1)
	Explain the impact of the U.S. Constitution on laws (CLO 2)
	Review Supreme Court decisions impacting criminal procedures (CLO 3)
	Examine the limitations placed on law enforcement by the U.S. Constitution (CLO 4)

Program Outcome 2:

Recognize the impact that significant Supreme Court rulings have on law enforcement.

Course	Course Learning Outcome (CLO)
ADJU 100: Introduction to Law Enforcement	Describe the early history and development of law enforcement agencies (CLO 1)
	Identify the role and functions of various agencies (CLO 2)
	Recognize the basic tasks and styles of policing (CLO 3)
	Outline the basic legal restrictions on law enforcement (CLO 4)
	Describe the fundamental principles of social control (CLO 5)
ADJU-102: Introduction to Criminal Justice	Review the foundations of the criminal justice system (CLO 1)
	Examine the role and function of police (CLO 2)
	Identify the structure and purpose of the court system (CLO 3)
	Recognize the functions of jails, prisons, and community supervision (CLO 4)
	Identify crime prevention techniques and theories (CLO 5)
ADJU 114: Constitutional Law	Describe the basic legal principles of the U.S. Constitution (CLO 1)
	Explain the impact of the U.S. Constitution on laws (CLO 2)
	Review Supreme Court decisions impacting criminal procedures (CLO 3)
	Examine the limitations placed on law enforcement by the U.S. Constitution (CLO 4)

Program Outcome 3:

Identify a violation of Missouri law based on a description of an action.

Course	Course Learning Outcome
ADJU 100: Introduction to Law Enforcement	Describe the early history and development of law enforcement agencies (CLO 1)
	Identify the role and functions of various agencies (CLO 2)
	Recognize the basic tasks and styles of policing (CLO 3)
	Outline the basic legal restrictions on law enforcement (CLO 4)
	Describe the fundamental principles of social control (CLO 5)
ADJU-102: Introduction to Criminal Justice	Review the foundations of the criminal justice system (CLO 1)
	Examine the role and function of police (CLO 2)
	Identify the structure and purpose of the court system (CLO 3)
	Recognize the functions of jails, prisons, and community supervision (CLO 4)
	Identify crime prevention techniques and theories (CLO 5)
ADJU 113: Criminal Law	Describe the basic legal principles of criminal law (CLO 1)
	Explain the impact of the U.S. Constitution on laws (CLO 2)
	Review the model penal code and Missouri criminal statutes (CLO 3)
	Differentiate criminal offenses based on legal classifications (CLO 4)
	Examine the elements and characteristics of various crimes (CLO 5)
ADJU 233: Criminal Investigations	Identify the application of procedures discussed in previous courses (CLO 1)
	Employ techniques acquired while completing the criminal justice program (CLO 2)
	Analyze the day-to-day operations of the agency (CLO 3)
	Apply learned knowledge to actual situations (CLO 4)

	Configure and troubleshoot advanced operations of routers and implement RIP, OSPF, and EIGRP routing protocols for IPv4 and IPv6. (CLO 6)
	Manage Cisco IOS® Software licensing and configuration files. (CLO 7)

Program Outcome 4:

Identify legal terminology and procedures used within the criminal justice system.

Course	Course Learning Outcome (CLO)
ADJU 100: Introduction to Law Enforcement	Describe the early history and development of law enforcement agencies (CLO 1)
	Identify the role and functions of various agencies (CLO 2)
	Recognize the basic tasks and styles of policing (CLO 3)
	Outline the basic legal restrictions on law enforcement (CLO 4)
	Describe the fundamental principles of social control (CLO 5)
ADJU-102: Introduction to Criminal Justice	Review the foundations of the criminal justice system (CLO 1)
	Examine the role and function of police (CLO 2)
	Identify the structure and purpose of the court system (CLO 3)
	Recognize the functions of jails, prisons, and community supervision (CLO 4)
	Identify crime prevention techniques and theories (CLO 5)
ADJU 213: Court Procedures*	Explain the structure and organization of the court system (CLO 1)
	Describe the hierarchy of the courts (CLO 2)
	Identify each step of the trial process (CLO 3)
	Review landmark court decisions related to criminal procedures (CLO 4)
ADJU-104 Introduction to Criminal Courts	Recognize the structure and history of the criminal court system (CLO 1)
	Differentiate the roles of a prosecutor, defense attorney, judge, and jury (CLO 2)
	Review the procedures within the trial process (CLO 3)
	Identify sentencing options and appeals (CLO 4)

*ADJU-213 was replaced with ADJU-104 in 2019 for this program outcome.

Program Outcome 5:

Distinguish philosophical eras, sociological theories, and significant historic events impacting law enforcement.

Course	Course Learning Outcome (CLO)
ADJU 100: Introduction to Law Enforcement	Describe the early history and development of law enforcement agencies (CLO 1)
	Identify the role and functions of various agencies (CLO 2)
	Recognize the basic tasks and styles of policing (CLO 3)
	Outline the basic legal restrictions on law enforcement (CLO 4)
	Describe the fundamental principles of social control (CLO 5)
ADJU-102: Introduction to Criminal Justice	Review the foundations of the criminal justice system (CLO 1)
	Examine the role and function of police (CLO 2)
	Identify the structure and purpose of the court system (CLO 3)
	Recognize the functions of jails, prisons, and community supervision (CLO 4)
	Identify crime prevention techniques and theories (CLO 5)
ADJU-243	Describe various theories on management (CLO 1)
	Explain the role of the police manager (CLO 2)

Police Administration	Describe the impact managers have upon employees and the public (CLO 3)
	Create a department budget (CLO 4)
	Construct an employee schedule (CLO 5)
ADJU 223: Community Policing and Homeland Security	Describe each era of policing history (CLO 1)
	Identify various policing strategies used in the United States over the past 150 years (CLO 2)
	Discuss the concepts of Strategic, Neighborhood and Problem-Oriented Policing (CLO 3)
	Describe strategies used in implementing Community Policing (CLO 4)
	Identify the events which led to the Homeland Security Act of 2002 (CLO 5)
	Explain the strategies, operations and tactics of Homeland Security (CLO 6)

Introduction

To assess student learning within the Criminal Justice AAS program, ADJU-100 Introduction to Law Enforcement and ADJU-102 Introduction to Criminal Justice are used as introductory assessment points as a student begins their degree. The program learning outcomes resulting from the ADJU-100 and ADJU-102 courses represent a novice-level knowledge of the students. The same assessment tool was used for ADJU-100 and ADJU-102. All five learning outcomes are assessed at this point. The learning outcomes are also assessed at specific points in the program which have been scaffolded in the curriculum and aligned to the programmatic outcomes. For example, Program Learning Outcome #3 evaluates a student's knowledge of Missouri law. The students' data results of outcome #3 from the introductory level ADJU-100 or ADJU-102 are compared to the assessment results from ADJU-113 Criminal Law, a course that extensively covers the area of study. The goal is to demonstrate student knowledge of each learning outcome after completing the higher-level course as they progress through the Criminal Justice AAS program. This report provides the results for the 2023-24 academic year.

Program Outcomes Rubric

Competency Areas	I	II	III	IV
Differentiate Constitutional Amendments	0% - 25%	26% - 50%	51% - 75%	76% - 100%
Impact of significant Supreme Court rulings	0% - 25%	26% - 50%	51% - 75%	76% - 100%
Identify a violation of Missouri law	0% - 25%	26% - 50%	51% - 75%	76% - 100%
Identify legal terminology	0% - 25%	51% - 75%	51% - 75%	76% - 100%
Distinguish eras, theories, and historic events	0% - 25%	76% - 100%	51% - 75%	76% - 100%

Program Outcome #1

Differentiate Constitutional Amendments

Verified by the following student assignment tool:

A sixty question-exam given each semester to all students (twelve questions per outcome) in the entry-level ADJU-100 and ADJU-102 courses. Results of first semester students will be compared to the results of students completing the final semester of the program at which time the student will have complete a twenty-four-question exam assessing the specific outcome following the completion of the higher-level course specific to each program outcome. The same twelve questions from ADJU-100 and ADJU-102 as well as twelve additional questions concerning the same outcomes. Each student is assessed with the same questions.

ADJU-100/ADJU-102 Scoring Rubric

Each of the five outcomes of this assessment are scored separately.

I	II	III	IV
0 – 3 items correct	4 – 6 items correct	7 – 9 items correct	10 – 12 items correct

ADJU-114 Scoring Rubric

I	II	III	IV
0–6 items correct	7–12 items correct	13 –18 items correct	19– 24 items correct

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ADJU-100	Intro to Law Enforcement	2	12	Sections: 0 Students: 0	FT: 1 PT:0	Yes
ADJU-102	Intro to Criminal Justice	1	10	Sections: 0 Students: 0	FT:1 PT:0	Yes
ADJU-114	Constitutional Law	1	8	Sections: 1 Students: 0	FT:1 PT:0	Yes

		I	II	III	IV	Total # of Students
ADJU-100	#	0	0	0	12	12
	%	0%	0%	%	100%	
ADJU-102	#	0	0	1	9	10
	%	0%	0%	10%	90%	
ADJU-114	#	0	0	0	8	8
	%	0%	0%	0%	100%	

Assessment Results

Comparison of 2022-23 to 2023-24:

In this reporting year, 100% of ADJU-100 students reached category IV compared to 91% the previous year. 90% of ADJU-102 students this year reached category IV compared to 71.5% the previous year. 100% of ADJU-114 students reached category IV in both years.

Program Outcome #1: Differentiate Constitutional Amendments

The following table compares the scores of ADJU-100/102 students to ADJU-114 students for SLO #1:

Timeframe	ADJU-100 Average Test Score	ADJU-102 Average Test Score	ADJU-114 Average Test Score	Percentage of Increase
2023-2024	95.9%	93.3%	98.4%	2.6%/5.2%
2022-2023	95.4%	88.1%	98.2%	2.9%/11.5%
2021-2022	72.9%	77.8%	70.8%	-2.9%/-9.0%
2020-2021	93.1%	83.7%	91.6%	-1.7% / 8.7%
2019-2020	97.9%	85.0%	90.7%	-7.3% / 3.1%
2018-2019	81.7%	N/A	91.4%	11.7%
2017-2018	81.7%	N/A	79.4%	- 2.9%
2016-2017	84.6%	N/A	90.4%	6.5%
2015-2016	79.3%	N/A	93.2%	15.0%

Program Outcome #1 assesses the student's ability to differentiate Constitutional amendments. As with the previous reporting year, students have demonstrated a significant knowledge of Constitutional amendments.

Analysis

Data shows that students are demonstrating a strong understanding of Constitutional amendments at the entry level (ADJU-100 and ADJU-102). As a result, there would not be a significant change in the score after completion of ADJU-114.

Use of Results for Improvement

Based on the high scores, there is no need to make any changes.

What is the proposed timeline for the changes outlined above?

No changes are proposed.

Additional Summary Notes

Anomalies in the results that were noticed:

No anomalies were observed.

Were there any patterns in the data observed?

The results are consistent with previous reporting years.

Program Outcome #2

Recognize the impact that significant Supreme Court rulings have on law enforcement.

ADJU-100 Scoring Rubric

Each of the five outcomes of this assessment are scored separately.

I	II	III	IV
0 – 3 items correct	4 – 6 items correct	7 – 9 items correct	10 – 12 items correct

ADJU 114 Scoring Rubric

I	II	III	IV
0– 6 items correct	7– 12 items correct	13–18 items correct	19– 24 items correct

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ADJU-100	Intro to Law Enforcement	2	12	Sections: 0 Students: 0	FT: 1 PT:0	Yes
ADJU-102	Intro to Criminal Justice	1	10	Sections: 0 Students: 0	FT:1 PT:0	Yes
ADJU-114	Constitutional Law	1	8	Sections: 1 Students: 9	FT:1 PT:0	Yes

		I	II	III	IV	Total # of Students
ADJU-100	#	0	0	0	12	12
	%	0%	0%	0%	100%	
ADJU-102	#	0	0	3	7	10
	%	0%	0%	30%	70%	
ADJU-114	#	0	0	1	7	8
	%	0%	0%	12.5%	87.5%	

Assessment Results

Comparison of 2022-23 to 2023-24:

In this reporting year, 100% of ADJU-100 students reached category IV compared to 54.5% the previous year. 70% of ADJU-102 students this year reached category IV compared to 57.2% the previous year. 87.5% of ADJU-114 students reached category IV compared to 88.9% the previous year.

Program Outcome #2: Recognize the impact that significant Supreme Court rulings have on law enforcement.

The following table compares the scores of ADJU-100/102 students to ADJU-114 students for SLO #2:

Timeframe	ADJU-100 Average Test Score	ADJU-102 Average Test Score	ADJU-114 Average Test Score	Percentage of Increase
2023-2024	94.4%	89.2%	88.5%	-6.2%/-0.8%
2022-2023	79.5%	82.1%	92.1%	15.8%/12.2%
2021-2022	69.4%	72.5%	60.6%	-12.7%/-16.5%
2020-2021	88.2%	73.7%	94.0%	6.2% / 21.6%
2019-2020	66.6%	89.9%	90.1%	26.1% / 0.3%
2018-2019	71.4%	N/A	94.3%	24.3%
2017-2018	76.6%	N/A	86.3%	11.3%
2016-2017	73.2%	N/A	85.2%	14.1%
2015-2016	81.2%	N/A	92.5%	12.3%

Program Outcome #2 assesses the student's ability to recognize the impact that significant Supreme Court rulings have on law enforcement. As the table above shows, there have been mixed results over the years.

Analysis

During this reporting year, the average score of students completing ADJU-114 was slightly lower than the entry level courses. While this was unexpected and not desired, it should be noted that there were only eight students who completed ADJU-114. Seven of the eight students scored at level IV of the rubric. A single student caused the overall average score of ADJU-114 to drop below average score of ADJU-102. The average of the other seven students for this learning outcome was 92.2%, which is higher than the previous year. There was no pattern observed concerning which questions students got correct or incorrect.

Use of Results for Improvement

There was no data suggesting any needed changes.

What is the proposed timeline for the changes outlined above?

No changes are proposed.

Additional Summary Notes

Anomalies in the results that were noticed:

Due to the small sample of students, I would not conclude that any anomaly exists.

Were there any patterns in the data observed?

There are no patterns to report.

Program Outcome #3

Identify a violation of Missouri law based on a description of an action.

ADJU-100/102 Scoring Rubric

Each of the five outcomes of this assessment are scored separately

I	II	III	IV
0 – 3 items correct	4 – 6 items correct	7 – 9 items correct	10 – 12 items correct

ADJU-113 and ADJU-233 Scoring Rubric

I	II	III	IV
0 – 6 items correct	7 – 12 items correct	13 – 18 items correct	19 – 24 items correct

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ADJU-100	Introduction to Law Enforcement	2	12	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-102	Introduction to Criminal Justice	1	10	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-113	Criminal Law	2	17	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-233	Criminal Investigations	1	8	Sections: 0 Students: 0	FT: 1 PT: 0	Yes

		I	II	III	IV	Total # of Students
ADJU-100	#	0	5	7	0	12
	%	0%	41.7%%	58.3%	0%	
ADJU-102	#	0	1	5	4	10
	%	0%	10%	50%	40%	
ADJU-113	#	0	1	11	5	17
	%	0%	5.9%	64.7%	29.4%	
ADJU-233	#	0	1	5	2	8
	%	0%	12.5%	62.5%	25%	

Assessment Results

Comparison of 2022-23 to 2023-24:

In this reporting year, 58.3% of ADJU-100 students reached category III or IV compared to 18.2% the previous year. 90% of ADJU-102 students this year reached category III or IV compared to 71.4% the previous year. 94.1% of ADJU-113 students reached category III or IV compared to 100% the previous year. 87.5% of ADJU-233 students reached category III or IV compared to 100% the previous year. It should be noted that the reduction in ADJU-113 and ADJU-233 compared to the previous year consisted of a single student in each course only reaching category II. The low number of students caused the single student to reduce the total percentage by a noticeable amount.

Program Outcome #3: Identify a violation of Missouri law based on a description of an action.

The following table compares scores of ADJU-100/102 students to ADJU-113 and ADJU-233 students for SLO #3:

Timeframe	ADJU-100 Average Test Score	ADJU-102 Average Test Score	ADJU-113 Average Test Score	Percentage of Increase	ADJU-233 Average Test Score	Percentage of Increase
2023-2024	60.0%	66.7%	68.6%	12.6%/2.8%	65.0%	8.7%/-2.6%
2022-2023	55.3%	60.7%	70.7%	27.8%/16.5%	66.9%	21.0%/10.2%
2021-2022	58.0%	56.0%	87.3%	50.5% / 55.8%	63.6%	9.6% / 13.5%
2020-2021	42.7%	55.0%	74.6%	42.8% / 26.3%	71.7%	40.5% / 23.3%
2019-2020	64.5%	53.5%	72.9%	11.6% / 26.7%	N/A	N/A
2018-2019	50.4%	N/A	73.8%	31.8%	85.3%	41.0%
2017-2018	51.7%	N/A	87.0%	40.6%	88.5%	43.6%
2016-2017	50.4%	N/A	74.27%	32.2%	77.7%	35.2%
2015-2016	44.1%	N/A	80.3%	45.0%	78.5%	43.9%

Program Learning Outcome # 3 assesses the student's ability to identify a violation of Missouri law based on a description of an action. It is expected that students will have very little

knowledge of specific criminal statutes and elements of crimes upon entering the program. It is the most difficult student learning outcome, and the goal is to increase this knowledge through multiple courses within the program.

Analysis

The results of the past two reporting years have been significantly lower than previous reporting years. The primary difference would be the modality of ADJU-113. In the past, about half of students would take ADJU-113 face-to-face. Today, this course is offered online. Due to the demand of online courses and almost complete lack of ability of students to take face-to-face courses, ADJU-113 will continue to be offered online. Revisions must be made to the online course to compensate for this. There was no pattern observed concerning which questions students got correct or incorrect.

Use of Results for Improvement

Videos by the instructor further clarifying Missouri laws and how they are to be applied need to be added to the online ADJU-113 course.

What is the proposed timeline for the changes outlined above?

This revision should be completed by Spring 2025 when ADJU-113 will be next offered.

Additional Summary Notes

Anomalies in the results that were noticed:

The results of the past two years are significantly lower than previous years.

Were there any patterns in the data observed?

As previously stated, the results over the past two years indicate improvements are needed within ADJU-113 related to Missouri law.

Program Outcome #4

Identify legal terminology and procedures used within the criminal justice system.

ADJU-100 Scoring Rubric

Each of the five outcomes of this assessment are scored separately.

I	II	III	IV
0 – 3 items correct	4 – 6 items correct	7 – 9 items correct	10 – 12 items correct

ADJU-213 and ADJU-104 Scoring Rubric

I	II	III	IV
0 – 6 items correct	7 – 12 items correct	13 – 18 items correct	19 – 24 items correct

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ADJU-100	Introduction to Law Enforcement	2	2	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-102	Introduction to Criminal Justice	1	1	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-104	Introduction to Criminal Courts	1	1	Sections: 0 Students: 0	FT: 1 PT: 0	Yes

		I	II	III	IV	Total # of Students
ADJU-100	#	0	0	0	12	12
	%	0%	0%	%	100%	
ADJU-102	#	0	0	0	10	10
	%	0%	0%	%	100%	
ADJU-104	#	0	0	0	11	11
	%	0%	0%	%	100%	

Assessment Results

Comparison of 2022-23 to 2023-24:

In this reporting year, 100% of ADJU-100 students reached category IV compared to 81.8% the previous year. 100% of ADJU-102 students this year reached category IV compared to 85.7% the previous year. 100% of ADJU-104 students reached category IV compared to 91.7% the previous year.

Program Outcome #4: Identify legal terminology and procedures used within the criminal justice system.

The following table compares the scores of ADJU-100/102 students to ADJU-213/ADJU-104 students for SLO #4:

Timeframe	ADJU-100 Average Test Score	ADJU-102 Average Test Score	ADJU-213 / ADJU-104* Average Test Score	Percentage of Increase
2023-2024	94.4%	96.7%	98.1%	3.8%/1.5%
2022-2023	91.6%	88.1%	95.4%	4.1% / 8.3%
2021-2022	80.7%	83.3%	93.8%	14.0% / 11.2%
2020-2021	81.3%	85.4%	88.0%	7.7% / 3.0%
2019-2020	85.3%	93.4	N/A	N/A
2018-2019	72.8%	N/A	95.8%*	24.1%
2017-2018	73.3%	N/A	89.2%	17.9%
2016-2017	72.7%	N/A	93.2%	22.0%
2015-2016	79.4%	N/A	97.5%	18.6%

*NOTE: ADJU 213 was replaced with ADJU 104 during the 18-19 academic year.

Analysis

Learning outcome #4 assesses the ability of the student to identify legal terminology and procedures used within the criminal justice system. The average scores of both the entry-level courses and the higher-level course were all very high. While the ADJU-104 scores have been high over the past several years, there was an increase in the ADJU-100 and

ADJU-102 scores compared to previous years. There was no pattern observed concerning which questions students got correct or incorrect.

What is the proposed timeline for the changes outlined above?

No changes are needed based on the results.

Additional Summary Notes

Anomalies in the results that were noticed:

None.

Were there any patterns in the data observed?

Scores have been consistently high.

Program Outcome #5

Distinguish philosophical eras, sociological theories, and significant historic events impacting law enforcement.

ADJU-100/102 Scoring Rubric

Each of the five outcomes of this assessment are scored separately.

I	II	III	IV
0 – 3 items correct	4 – 6 items correct	7 – 9 items correct	10 – 12 items correct

ADJU-223 and ADJU-243 Scoring Rubric

I	II	III	IV
0 – 6 items correct	7 – 12 items correct	13 – 18 items correct	19 – 24 items correct

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ADJU-100	Introduction to Law Enforcement	2	12	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-102	Introduction to Criminal Justice	1	10	Sections: 0 Students: 0	FT: 1 PT: 0	Yes
ADJU-243	Police Administration	1	6	Sections: 0 Students: 0	FT: 1 PT: 0	Yes

		I	II	III	IV	Total # of Students
ADJU-100	#	0	0	2	10	12
	%	%	%	16.6%	83.4%	
ADJU-102	#	0	0	4	6	10
	%	0%	0%	40%	60%	
ADJU-243	#	0	1	2	3	6
	%	0%	16.7%	33.3%	50%	

Assessment Results

Comparison of 2022-23 to 2023-24:

In this reporting year, 83.4% of ADJU-100 students reached category IV compared to 36.3% the previous year. 60% of ADJU-102 students this year reached category IV compared to 71.4% the previous year. 50% of ADJU-243 reached category IV compared to 80% the previous year.

Program Outcome #5: Distinguish philosophical eras, sociological theories, and significant historic events impacting law enforcement.

The following table compares the scores of ADJU-100/102 students to ADJU-223 and ADJU-243 students for SLO #5:

Timeframe	ADJU-100 Average Test Score	ADJU-102 Average Test Score	ADJU-223 Average Test Score	Percentage of Increase	ADJU-243 Average Test Score	Percentage of Increase
2023-2024	87.5%	82.5%	N/A	N/A	79.7%	-9.0%-3.3%
2022-2023	71.2%	82.1%	88.3%	24.0% / 7.6%	85.4%	19.9% / 4.0%
2021-2022	71.1%	72.5%	87.6%	18.9% / 17.3%	75.0%	5.2% / 3.4%
2020-2021	65.1%	67.5%	86.6%	24.9% / 21.1%	73.6%	11.6% / 8.3%
2019-2020	72.8%	73.2%	87.0%	16.4% / 15.9%	N/A	N/A
2018-2019	59.9%	N/A	95.8%	37.5%	78.9%	24.1%
2017-2018	64.6%	N/A	83.5%	22.3%	N/A	N/A
2016-2017	63.2%	N/A	86.3%	24.8%	N/A	N/A
2015-2016	60.5%	N/A	84.6%	28.5%	N/A	N/A

Analysis

Learning Outcome # 5 assesses the student's ability to distinguish philosophical eras, sociological theories, and significant historic events impacting law enforcement. In previous years, the learning outcome was assessed at the higher level with two courses, ADJU-223 Community Policing and Homeland Security and ADJU-243 Police Administration. ADJU-223 is no longer being offered. As a result, students have less opportunity to learn information related to this outcome. In the past, students scored higher in ADJU-223 than ADJU-243, thus demonstrating that course provided a stronger curriculum related to the outcome. There was no pattern observed concerning which questions students got correct or incorrect.

Use of Results for Improvement

ADJU-243 needs to be revised to increase the focus on the historical eras and events related to criminal justice. SOCI-230 Criminology is now a required course for the program. SOCI-230 was revised during this reporting year with an increased focus on the sociological theories and historical events related to criminology.

What is the proposed timeline for the changes outlined above?

The revisions will be completed prior to the course being offered in Fall 2025.

Additional Summary Notes

Anomalies in the results that were noticed:

It is not expected that the average score of ADJU-243 would be lower than ADJU-100 or ADJU-102. It should be noted that there were only six students who completed the outcome assessment.

Were there any patterns in the data observed?

With only six students completing the outcome assessment, the sample is not large enough to conclude any patterns.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 20XX-XX SLO report. (Use as many pages as necessary to describe.)

This was the first reporting year that ADJU-223 was not offered. This course had a significant focus on Program Outcome #5. Based on the outcome results for this year, it appears this had a negative impact on the outcome.

There will be a complete revision of program outcomes in the following year. Currently, only ADJU courses were used in this assessment. In the future, all courses within the program will be used and linked to a program outcome. The way students are assessed will also change to better reflect each student's knowledge during their final semester of the program.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

Because the results of the current assessment method have not yielded any new information within the past few years that has been helpful with improving the program, a complete revision will be made within the next year.



THREE RIVERS COLLEGE

Early Childhood Development

Program Level SLO Report

Heather Cornman – Program Manager

2023 - 2024

Program Purpose Statement

The Early Childhood Development curriculum is designed to prepare students for employment and leadership roles in licensed childcare centers, private preschools, and Head Start.

Program Outcomes

1. **Child Development and Learning in Context-** Early childhood educators are grounded in an understanding of the developmental period of early childhood from birth through age 8 across developmental domains; they understand each child as an individual with unique developmental variations and children learn and develop within relationships that includes families, cultures, languages, communities, and society.
2. **Family–Teacher Partnerships and Community Connections-** Early childhood educators understand that successful early childhood education depends upon educators’ partnerships with the families of the young children they serve and their communities. They know about, understand and value diversity in families; using this knowledge to create respectful, responsive, reciprocal relationships with families and to engage with them as partners in their young children’s development and learning.
3. **Child Observation, Documentation, and Assessment-** Early childhood educators understand that the primary purpose of assessments is to inform

instruction and planning in early learning settings. They know how to use observation, documentation, and other appropriate assessment approaches and tools in ways that are ethically grounded and developmentally, culturally, ability, and linguistically appropriate to document developmental progress and promote positive outcomes for each child.

4. **Developmentally, Culturally, and Linguistically Appropriate Teaching Practices**-Early childhood educators understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children's ages and characteristics and on the settings in which teaching and learning occurs.
5. **Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum**- Early childhood educators have knowledge of the content of the academic disciplines (e.g., language and literacy, the arts, mathematics, social studies, science, technology and engineering, physical education) and of the pedagogical methods for teaching each discipline.
6. **Professionalism as an Early Childhood Educator**-Early childhood educators identify and participate as members of the early childhood profession. They serve as informed advocates for young children, for the families of the children in their care, and for the early childhood profession.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Early Childhood Development: Program Outcomes Mapping

Program Outcome 1:	
Child Development and Learning in Context	
Course	Course Learning Outcome (CLO)
ECD 126: Health, Safety, and Nutrition	Demonstrate how to create and maintain safe learning environments. (CLO 2)
ECD 202: Survey of Early Childhood Development	Recognize the history and importance of early childhood development (CLO 1)
	Demonstrate an understanding of child growth and development (CLO 2)
ECD 209: CDA Competency	Plan developmentally appropriate experiences to advance physical and intellectual competence. (CLO 2)
	Demonstrate how to support social and emotional development along with positive guidance. (CLO 3)
ECD 237: Early Childhood Development Lab	Plan curriculum that is developmentally appropriate for children. (CLO 1)
ECD 247: Early Childhood Curriculum	Design curriculum that is child centered, child initiated and responsive to families. (CLO 1)
	Implement curriculum that supports play and learning using developmental, inclusive, and anti-bias principles. (CLO 2)

ECD 295: Early Childhood Practicum I	Prepare learning experiences appropriate for infants and toddlers. (CLO 2)
	Illustrate appropriate and respectful guidance and classroom management strategies with infants and toddlers. (CLO 3)
ECD 296: Early Childhood Practicum II	Prepare learning experiences appropriate for preschool-aged children. (CLO 2)
	Illustrate appropriate and respectful guidance and classroom management strategies with preschool-aged children (CLO 3)

Program Outcome 2:	
Family–Teacher Partnerships and Community Connections	
Course	Course Learning Outcome (CLO)
ECD 209: CDA Competency	Recognize importance of establishing positive and productive relationships with families. (CLO 4)
ECD 235: Special Children	Distinguish importance of parent-teacher partnerships for involvement of families with special needs children. (CLO 4)
ECD 237: Early Childhood Development Lab	Develop strategies to inform and involve families in their children's learning and development. (CLO 3)
ECD 245: Early Childhood Administration	Assess strategies for family and community involvement (CLO 4)
ECD 247: Early Childhood Curriculum	Design curriculum that is child centered, child initiated and responsive to families. (CLO 1)
ECD 295: Early Childhood Practicum I	Demonstrate professional and ethical behaviors with children, colleagues, and families in the early childhood setting. (CLO 1)
ECD 296: Early Childhood Practicum II	Demonstrate professional and ethical behaviors with children, colleagues, and families in the early childhood setting. (CLO 1)

Program Outcome 3:	
Child Observation, Documentation, and Assessment	
Course	Course Learning Outcome
ECD 237: Early Childhood Development Lab	Use observations to assess development of children. (CLO 2)
ECD 245: Early Childhood Administration	Demonstrate developmentally appropriate planning for various age groups in an early childhood setting. (CLO 2)
ECD 247: Early Childhood Curriculum	Design curriculum that is child centered, child initiated and responsive to families. (CLO 1)
	Implement curriculum that supports play and learning using developmental, inclusive, and anti-bias principles. (CLO 2)
ECD 295: Early Childhood Practicum I	Prepare learning experiences appropriate for infants and toddlers. (CLO 2)

	Illustrate appropriate and respectful guidance and classroom management strategies with infants and toddlers. (CLO 3)
ECD 296: Early Childhood Practicum II	Prepare learning experiences appropriate for preschool-aged children. (CLO 2)
	Illustrate appropriate and respectful guidance and classroom management strategies with preschool-aged children (CLO 3)
	Implement curriculum that supports play and learning using developmental, inclusive, and anti-bias principles. (CLO 2)

Program Outcome 4:

Developmentally, Culturally, and Linguistically Appropriate Teaching Practices

Course	Course Learning Outcome (CLO)
ECD 126: Health, Safety, and Nutrition	Demonstrate how to create and maintain safe learning environments. (CLO 2)
ECD 202: Survey of Early Childhood Development	Employ the components of high-quality early childhood education in curriculum development (CLO 3)
ECD 209: CDA Competency	Examine how to ensure a well-run, purposeful program that is responsive to participant needs (CLO 5)
ECD 235: Special Children	Demonstrate how to plan an environment for inclusion of all children. (CLO 3)
ECD 245: Early Childhood Administration	Demonstrate developmentally appropriate planning for various age groups in an early childhood setting (CLO 2)
ECD 247: Early Childhood Curriculum	Design curriculum that is child centered, child initiated and responsive to families. (CLO 1)
	Implement curriculum that supports play and learning using developmental, inclusive, and anti-bias principles. (CLO 2)

Program Outcome 5:

Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum

Course	Course Learning Outcome (CLO)
ECD 247 Early Childhood Curriculum	Design curriculum that is child centered, child initiated and responsive to families. (CLO 1)
ECD 295: Early Childhood Practicum I	Prepare learning experiences appropriate for infants and toddlers. (CLO 2)
ECD 296: Early Childhood Practicum II	Prepare learning experiences appropriate for preschool-aged children. (CLO 2)

Program Outcome 6:	
Professionalism as an Early Childhood Educator	
Course	Course Learning Outcome (CLO)
ECD 202: Survey of Early Childhood Development	Apply knowledge of the role as a professional in the early childhood field. (CLO 6)
ECD 209: CDA Competency	Practice maintaining a commitment to professionalism. (CLO 6)
ECD 295: Early Childhood Practicum I	Demonstrate professional and ethical behaviors with children, colleagues, and families in the early childhood setting. (CLO 1)
ECD 296: Early Childhood Practicum II	Demonstrate professional and ethical behaviors with children, colleagues, and families in the early childhood setting. (CLO 1)

Introduction

The Early Childhood Development Program's Student Learning Outcomes are guided by the National Association for the Education of Young Children (NAEYC) national standards, ensuring that the program aligns with best practices and industry expectations for early childhood education.

It is the goal of the NAEYC to provide standards to ensure young children, birth through age eight, have equitable access to high-quality care and learning environments.

Program rubrics have been developed based on these standards. There are 6 core standards that describe the concepts and standards early childhood professionals are to implement to provide quality early education.

The six core standards describe what well-prepared early childhood teachers/educators should know, understand, and implement in the classroom. These standards are used to measure knowledge and practices regarding creating optimal learning environments, designing, and implementing curricula, using and refining teaching strategies, and interacting with children and families whose language, race, ethnicity, culture, and social and economic status may be vastly different from their backgrounds.

Program Outcome #1 Rubric

Child Development and Learning in Context

Early childhood educators are grounded in an understanding of the developmental period of early childhood from birth through age 8 across developmental domains; they understand each child as an individual with unique developmental variations and children learn and develop within relationships that includes families, cultures, languages, communities, and society.

Competency Areas	I	II	III	IV
Uses developmental knowledge to create healthy, respectful, supportive, and challenging learning environments	Fails to demonstrate how to plan the environment, schedule, and daily activities to promote each child's development and learning.	Identifies importance of planning the environment, schedule, and daily activities to promote each child's development and learning.	Recognizes effective planning the environment, schedule, and daily activities to promote each child's development and learning.	Demonstrates effective planning of the environment, schedule, and daily activities to promote each child's development and learning.

Program Outcome # 1

Child Development and Learning in Context

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 247	Early Childhood Curriculum	1	10	0	1	Yes Fall only course
ECD 296	Early Childhood Practicum II	1	4	0	1	Yes Spring only course

		I	II	III	IV	Total # of Students
Course ECD 247	#	-	3	3	4	10
	%	-	30%	30%	40%	
Course ECD 296	#	-	-	2	2	4
	%	-	-	50%	50%	

Assessment Results

Program Outcome #1: Child Development and Learning in Context

This outcome was assessed using the environmental plan piece of the lesson plan assignment from ECD 247-Early Childhood Curriculum. Students must develop a lesson plan that includes learning areas, materials and activities, incorporating multicultural/diverse inclusion activities or materials.

Forty-three percent (n=6) of students scored at Level IV.

Thirty-six percent (n=5) of students scored at Level III.

Thirty percent (n=3) of students scored at Level II.

To effectively plan for promoting learning and development, activities should be designed to engage all developmental domains while incorporating strategies to assess understanding of the presented concepts. The experiences may be appropriate for learning, yet to reach a higher level of understanding, students needed to include experiences that would challenge children at all levels of development.

Students develop a lesson plan in ECD 247-Early Childhood Curriculum in the Fall semester. They are then required to implement this lesson plan during their practicum (ECD 296) and complete an evaluation of the process. The evaluations revealed that some students observed significant differences between creating the lesson plan for the

assignment and its actual implementation. Of the ten students assessed, only four were enrolled in the Spring practicum course, having completed their lesson plans in the previous Fall semester.

Fifty percent (n=2) of students scored at Level IV.

Fifty percent (n=2) of students scored at Level III.

The students who scored at Level IV had appropriate lesson plans and their evaluation reflected how the children responded, how they assessed learning objectives and if their lesson plan met their expectations.

The students who scored at Level III mentioned they needed more hands-on learning experiences incorporated into the learning areas instead of planned group activities. One student mentioned more organization on her part was needed due to not having all materials needed at the time of plan implementation.

Analysis

The four students scoring at Level IV in PO created learning experiences that were appropriate, met the learning objectives, and were inclusive for all children. The experiences were developmentally appropriate regarding play, guided play, and direct instruction.

The three students scoring at Level III planned developmentally appropriate learning experiences, but they were not sufficiently challenging to score at Level IV.

The remaining students were unable to demonstrate developmentally appropriate and/or challenging learning experiences that were substantial and/or did not support the learning objectives.

Use of Results for Improvement

Students will continue to develop a lesson plan that demonstrates their knowledge of child development and how children learn.

Students need more guidance on how to clearly show the connection between their planned learning activities and the physical environment set-up. Meaning that, students require further instruction on how to explain or demonstrate how their learning experiences (lessons, activities, etc.) are connected to the design and arrangement of the learning environment (classroom layout, materials, resources, etc.). They need to understand how to align the physical space with their teaching plans to support the learning goals effectively. The lesson plan form needs to include more detailed instructions and guiding questions to help students complete it effectively.

The revision will provide clearer directions and prompts that will guide students in filling it out. These additional instructions or questions would help ensure that students include all necessary information and think more deeply about the key aspects of their lesson planning.

What is the proposed timeline for the changes outlined above?

Changes will need to be implemented to the ECD 247 Master Course Shell by end of Spring 2025 semester before course is offered again in Fall 2025.

Program Outcome #2 Rubric

Family–Teacher Partnerships and Community Connections

Early childhood educators understand that successful early childhood education depends upon educators’ partnerships with the families of the young children they serve and their communities. They know about, understand and value diversity in families; using this knowledge to create respectful, responsive, reciprocal relationships with families and to engage with them as partners in their young children’s development and learning.

Competency Areas	I	II	III	IV
Supports and engages families and communities through respectful, reciprocal relationships	Fails to show how to support and engage families and communities through respectful, reciprocal relationships.	Identifies ways of supporting and engaging families and communities through respectful, reciprocal relationships.	Recognizes ways of supporting and engaging families and communities through respectful, reciprocal relationships.	Demonstrates ways of supporting and engaging families and communities through respectful, reciprocal relationships.

Program Outcome #2

Family–Teacher Partnerships and Community Connections

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 247	Early Childhood Curriculum	1	10	0	1	Yes *Fall only course

		I	II	III	IV	Total # of Students
Course ECD 247	#	-	3	3	4	10
	%		30%	30%	40%	

Assessment Results

Program Outcome #2: Family–Teacher Partnerships and Community Connections

This outcome was assessed using the family engagement piece of the lesson plan assignment from ECD 247-Early Childhood Curriculum. Students are required to provide an opportunity for parents to be actively involved in their child’s learning. This activity is to be an extension of learning for the child based on the learning objectives planned in the lesson.

The level of engagement the opportunities provided to the families and child were examined.

Scoring was based on the suggestions and/or activities the students initiated for families and the depth of involvement for parents and child.

Forty percent (n=4) of students scored in Level IV.

Thirty percent (n=3) of students scored in Level III.

Thirty percent (n=3) of students scored in Level II.

Analysis

The four students scoring successfully at Level IV for this outcome was based on developmentally appropriateness of suggestions or activities the students provided parents to actively involve them in their child’s learning at home.

The three students scoring at Level III planned an activity that involved parents in their child's learning but were not as engaging, or didn't need as much involvement as at Level IV.

The three students scoring at Level II included family involvement, but the activities planned did not promote participation in their child's learning.

This outcome showed that most students were able to plan and implement learning activities for the children to engage parents with extending learning at home.

Use of Results for Improvement

Students will continue to be encouraged to provide learning resources to parents that enhance their involvement with their child's development and learning. After reviewing the assessment used to measure PO #2 and seeing 60% of students scored below Level IV, more emphasis could be placed on family and community involvement. This could be solved by creating a Family and Community course which is lacking in the ECD program.

What is the proposed timeline for the changes outlined above?

January 2025

- Create course title and learning objectives
- Choose textbook
- Present to Division Chair
- Meet with IE about course development and learning objectives
- Request master shell be created on Blackboard

February- March 2025

- Outline modules
- Create Course Content
 - Develop Lecture Materials: slides, readings, videos

- Design Assignments aligned with learning objectives.
- Create Assessments: quizzes, exams, or other assessment tools to measure student understanding.
- Develop master syllabus

April 2025

- Complete curriculum process to obtain approval
- Begin building course content in master shell
- Conduct Self-review
- Send course to DLS for review

May 2025

- Make revisions base on review feedback

August 2025

- Present new course for addition to 26FA academic schedule

Program Outcome #3 Rubric

Child Observation, Documentation, and Assessment

Early childhood educators understand that the primary purpose of assessments is to inform instruction and planning in early learning settings. They know how to use observation, documentation, and other appropriate assessment approaches and tools in ways that are ethically grounded and developmentally, culturally, ability, and linguistically appropriate to document developmental progress and promote positive outcomes for each child.

	I	II	III	IV
Knows about and uses observation, documentation, and other appropriate assessment tools and approaches	Fails to show understanding of observation, documentation, and other appropriate assessment tools and approaches.	Identifies observation, documentation, and other appropriate assessment tools and approaches.	Recognizes observation, documentation, and other appropriate assessment tools and approaches.	Demonstrates use of observation, documentation, and other appropriate assessment tools and approaches.

Program Outcome #3

Child Observation, Documentation, and Assessment

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 296	Early Childhood Practicum II	1	4	0	1	Yes Spring only course

		I	II	III	IV	Total # of Students
Course	#	-	-	2	2	4

	%	-	-	50%	50%	
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Assessment Results

This outcome is assessed with the Child Case Study students conduct in ECD 296-Early Childhood Practicum. It is an in-depth case study on one child between the ages of 0-5 years over the course of the semester. The purpose of this observation is to integrate course content with a hands-on experience to deepen student's understanding of child development theory and the multiple influences on a child's development. Students are required to complete a developmental checklist and utilize information collected in the case study. They are also required to include family, community, and cultural information. The student's reflection about the benefits of development was reviewed to clarify if student had an adequate understanding of the importance of assessment in tracking children's learning and development and the use of tools to assess development. The student's use of objective versus subjective observations in the case study was reviewed. Students were assessed on the extent they demonstrated the use of observation and documentation of the child's development and if findings were used to create child outcomes.

Fifty percent (n=2) of students scored in Level IV.

Fifty percent (n=2) of students scored in Level III.

Analysis

The difference between students who scored at Level IV compared to the two at Level III was the development of child outcomes.

The results of PO #3 indicate that students are illustrating how to observe and the importance of observing young children. The results exhibited one-half of students

adequately tracked and assessed the child's development along with providing suggestions for learning improvement.

Use of Results for Improvement

The case study will continue to be used to track this outcome. The instructor will concentrate on adding more information about child assessment and the importance of tracking this information to support learning and development for children.

What is the proposed timeline for the changes outlined above?

While preparing the course for Spring 25, the master shell will be reviewed to determine where more assessment information and/or practice can be added.

Program Outcome #4 Rubric

Developmentally, Culturally, and Linguistically Appropriate Teaching Practices

Early childhood educators understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children's ages and characteristics and on the settings in which teaching and learning occur.

Competency Areas	I	II	III	IV
Uses a broad repertoire of developmentally appropriate teaching/learning approaches	Fails to demonstrate use of developmentally appropriate teaching/learning approaches.	Identifies use of developmentally appropriate teaching/learning approaches.	Recognizes effective use of developmentally appropriate teaching/learning approaches.	Demonstrates effective use of developmentally appropriate teaching/learning approaches.

Program Outcome #4

Developmentally, Culturally, and Linguistically Appropriate Teaching Practices

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 296	Early Childhood Practicum II	1	4	0	1	Yes Spring only course

		I	II	III	IV	Total # of Students
Course ECD 296	#	-	-	2	2	4
	%	-	-	50%	50%	

Assessment Results

This outcome is assessed with the Child Case Study students conduct in ECD 296-Early Childhood Practicum. It is an in-depth case study on one child between the ages of 0-5 years over the course of the semester. An analysis of information gathered on the child

is to reflect in the understanding of the child's development. They are to evaluate the child's strengths and weaknesses and suggest additional learning approaches that would assist the child in meeting developmental goals.

The assessment focused on how effectively students reflected on and analyzed the child's developmental progress, and how clearly, they recorded their observations and explained the reasoning behind the conclusions they drew from those observations.

Fifty percent (n=2) of students scored in Level IV.

Fifty percent (n=2) of students scored in Level III.

Analysis

Level IV students demonstrated a comprehensive understanding of child development by providing clear and insightful discussions of the child's progress. They effectively documented their observations, offering detailed explanations of how the child interacted with the learning environment. These students also discussed how the learning environment and/or specific learning experiences influenced the child's understanding and development.

Level III students exhibited observation and developmental insights but did not provide detailed documentation of the child's interactions with learning experiences and/or the environment.

Use of Results for Improvement

The Child Case Study will continue to be used to assess PO #4.

What is the proposed timeline for the changes outlined above?

N/A

Program Outcome #5 Rubric

Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum

Early childhood educators have knowledge of the content of the academic disciplines (e.g., language and literacy, the arts, mathematics, social studies, science, technology and engineering, physical education) and of the pedagogical methods for teaching each discipline.

Competency Areas	I	II	III	IV
Uses appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child	Fails to use appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child.	Identifies the use of appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child.	Recognizes the use of appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child.	Demonstrates the use of appropriate early learning standards, and other resources to design, implement, and evaluate meaningful, challenging curricula for each child.

Program Outcome #5

Knowledge, Application, and Integration of Academic Content in the Early Childhood Curriculum

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 247	Early Childhood Curriculum	1	8	0	1	Yes *Fall only course

		I	II	III	IV	Total # of Students
Course	#	-	1	1	6	8
	%	-	13%	13%	75%	

Assessment Results

PO #5 is assessed by activity plans developed by students in ECD 247-Early Childhood Curriculum. Students plan learning activities for each curriculum area studied in coursework and reading materials. They are required to create learning objectives related to Missouri Early Learning Standards. They will discuss the procedure, guidance, and assessment strategies for the planned learning experience. Each student created 11 activity plans over the semester, with the math plan being used to evaluate their performance.

Seventy-five percent (n=6) of students scored at Level IV.

Thirteen percent (n=1) of students scored at Level III.

Thirteen percent (n=1) of students scored at Level II.

Analysis

The results indicate that most students (6 out of 8) demonstrated exceptional ability in aligning the math activity plans with the Missouri Early Learning Standards as well as, developing clear, measurable learning objectives, well-detailed procedures, guidance strategies, and assessments that met or exceeded expectations.

The one student who scored at Level III did not align their objectives with the Missouri Early Learning Standards, yet they created a quality, appropriate learning experience.

The student who was not successful did not create a quality plan that met the minimal standards required for the assessment.

Use of Results for Improvement

The activity plans will remain a key assessment tool for PO #5. These plans also serve as the foundation for the development of a comprehensive lesson plan, which incorporates all curriculum elements and is used to assess other program outcomes.

What is the proposed timeline for the changes outlined above?

N/A

Program Outcome #6 Rubric

Professionalism as an Early Childhood Educator

Early childhood educators identify and participate as members of the early childhood profession. They serve as informed advocates for young children, for the families of the children in their care, and for the early childhood profession.

Competency Areas	I	II	III	IV
Knows about and upholds ethical standards and other professional guidelines	Fails to understand and uphold ethical standards and other professional guidelines.	Identifies understanding and upholds ethical standards and other professional guidelines.	Recognizes ethical standards and other professional guidelines.	Demonstrates ethical standards and other professional guidelines.

Program Outcome # 6

Professionalism as an Early Childhood Educator

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ECD 209	CDA Competency	2	16	0	1	Yes
ECD 295	Early Childhood Practicum I	1	3	0	1	Yes, Spring Only course

		I	II	III	IV	Total # of Students
Course ECD 209	#	1	1	3	11	16
	%	6%	6%	19%	69%	
Course ECD 295	#	-	1	-	2	3
	%	-	33%	-	75%	

Assessment Results

The assessment used for PO #6 was a Philosophy Statement written by students. Both courses require students to develop a teaching philosophy that outlines their beliefs and approach as an educator. A piece of the statement is to demonstrate through their writing their commitment to ethical and professional practices. Educational theories and practices also are to be discussed which guide the student's approach to the education and care of young children, explaining how they influence teaching methods and classroom environment.

Sixty-eight percent (n=13) of students scored at Level IV.

Sixteen percent (n=3) of students scored at Level III.

Eleven percent (n=2) of students scored at Level II.

Five percent (n=1) of students scored at Level I.

Analysis

The majority of students demonstrated a strong ability to clearly articulate their teaching philosophy, effectively explaining their approach to education and how young children learn. These students provided well-written, thoughtful statements that showed a deep understanding of providing hands-on, interactive, and engaging experiences to support children's development. They also successfully demonstrated a clear commitment to ethical and professional standards by sharing their beliefs on advocating for children and families.

The students at Level III demonstrated a solid understanding of teaching philosophy and appropriate practices but did not provide in-depth descriptions to reach Level IV.

Level II students showed limited understanding in articulating their teaching philosophy. They may have provided vague or underdeveloped explanations.

The Level I student did not sufficiently provide key components required of the statement.

Use of Results for Improvement

This was the first time using the Philosophy Statement for assessment. Since it showed students could articulate their early childhood beliefs and commitment to professionalism, the Philosophy Statement will continue to be used.

What is the proposed timeline for the changes outlined above?

N/A

Additional Summary Notes

Anomalies in the results that were noticed:

Program Outcomes #3 and #4 were assessed through a case study conducted in ECD 296 - Practicum II: Preschool. While only four out of five students completed the study, this smaller sample size still yielded valuable insights, as the case study involved substantial observation, reflection, and evaluation by the students.

Were there any patterns in the data observed?

There is a noticeable correlation between the quality of work, understanding of lesson planning, assessment, and professionalism in students employed at an early learning facility compared to those without classroom experience.

Addendum

Program Name: Early Childhood Development

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 2023-24 SLO report. (Use as many pages as necessary to describe.)

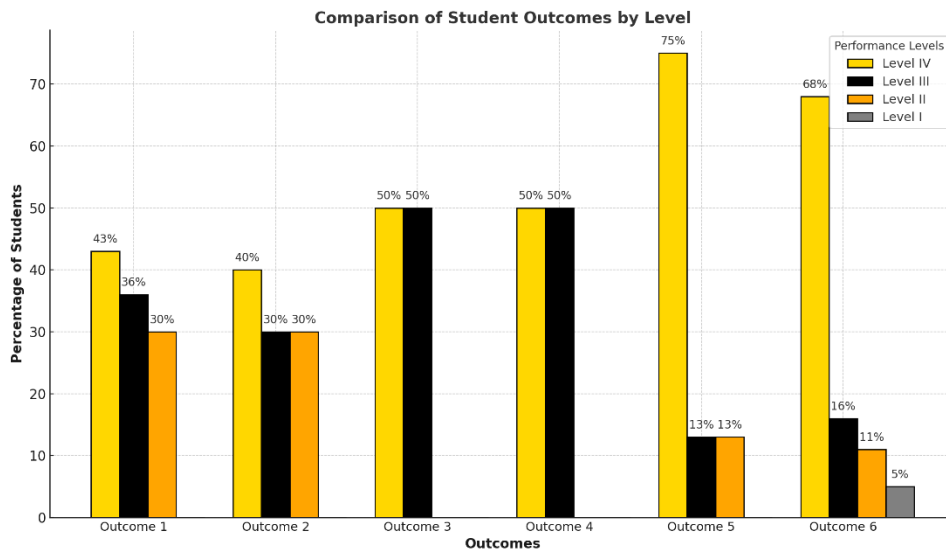
The only course changes made during the report period were changing from a physical textbook to an e-book in ECD 126-Health, Safety, and Nutrition, ECD 202-Survey of Early Childhood, and ECD 247-Early Childhood Curriculum.

An additional course was added to PO #1 which will affect outcomes in the 2023-24 report. In addition to the assessment tool changing for PO #5 and #6.

After review of the report, the program outcomes and rubrics will be revised. The program outcomes from the NAEYC will still be the basis, but they will be revised to reflect more concise measurable outcomes.

The outcome rubrics will be revised to better align with the program outcomes and provide improved connections between the outcome and assessment.

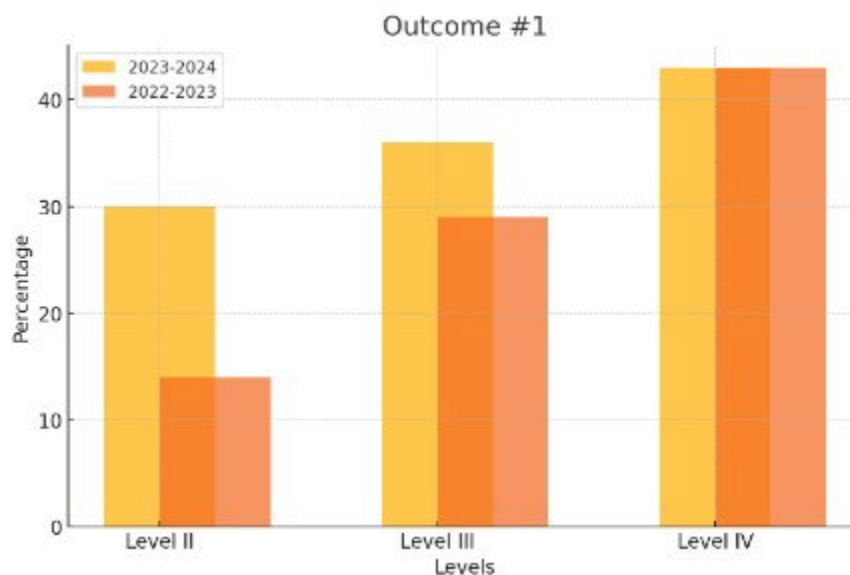
- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)



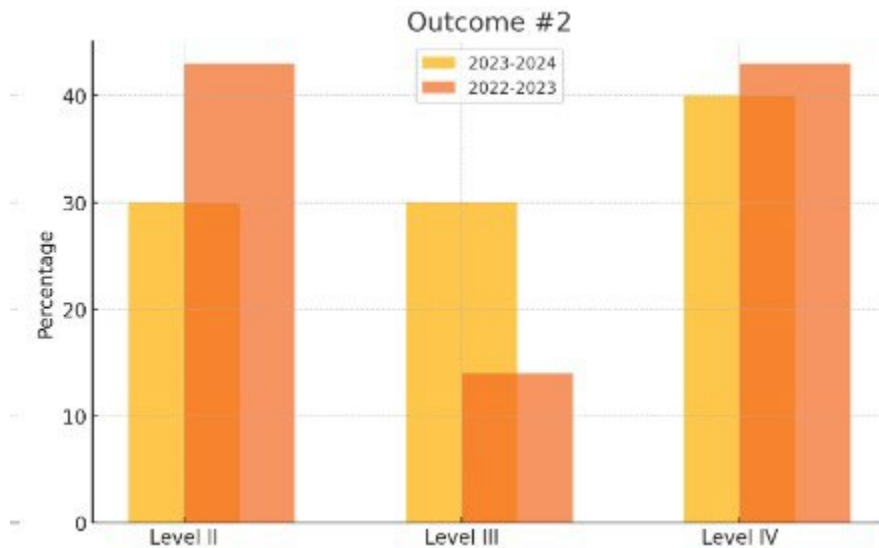
OpenAI. (2024). *ChatGPT* [Large language model]. <https://chatgpt.com>

The chart depicts a large proportion of students scoring in Level III or above suggesting that many students are performing well in these assessments for the 2023-24 reporting period.

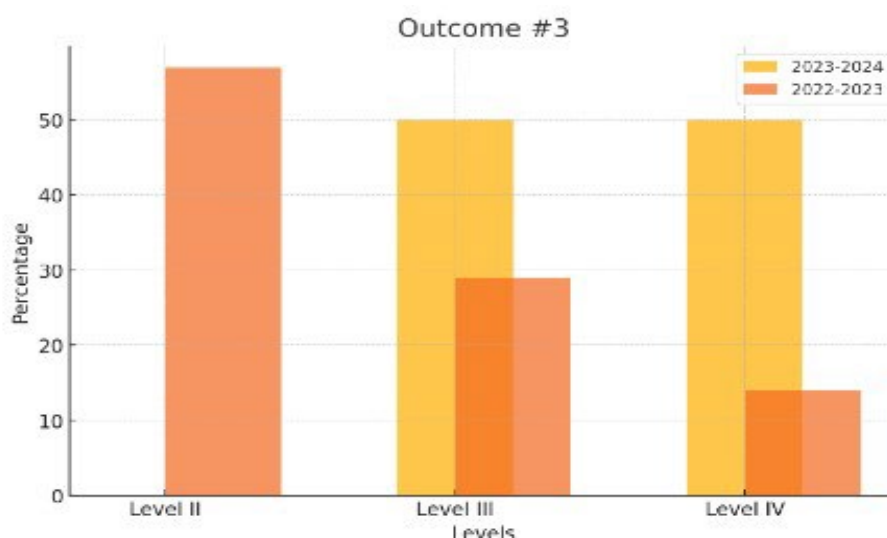
The information below gives a visual representation between 2022-23 Student Learning Outcomes and the 2023-24 report.



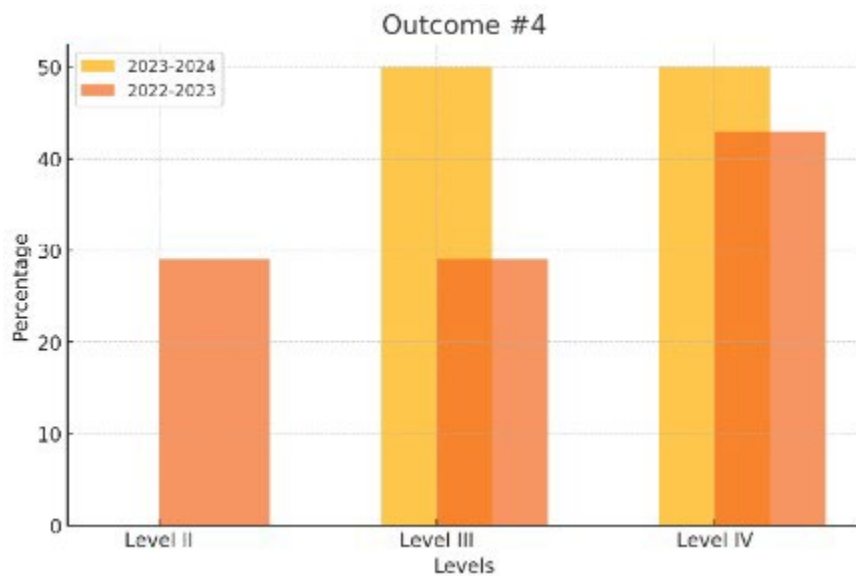
The performance at Level IV remained the same, but there was a 7% increase in Level III scores. Sixteen percent more students scored in Level II in 2023-24. This could be an indication that students continue to struggle with writing measurable learning objectives and creating learning opportunities to support them.



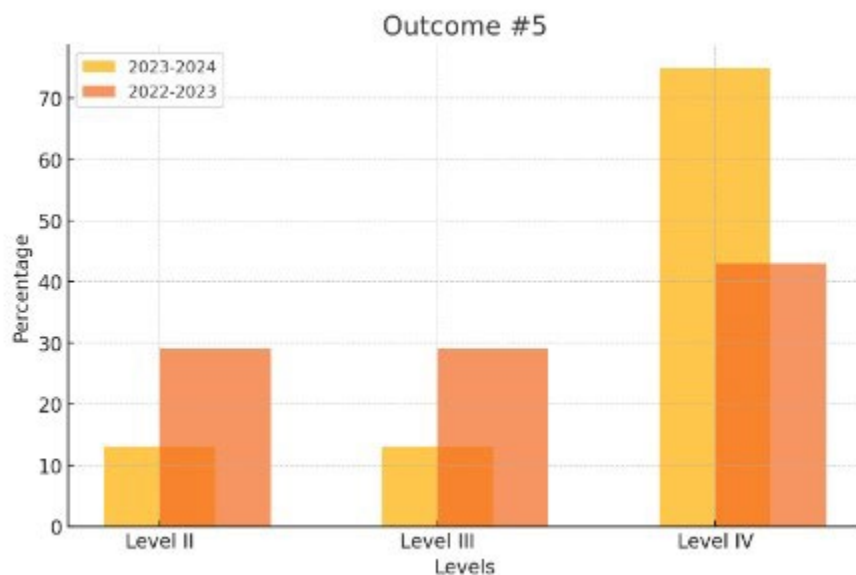
This outcome shows 16% improvement at Level III and 13% improvement in Level II, meaning fewer students scored in the lower categories and more moved into higher categories. There was a slight drop at Level IV.



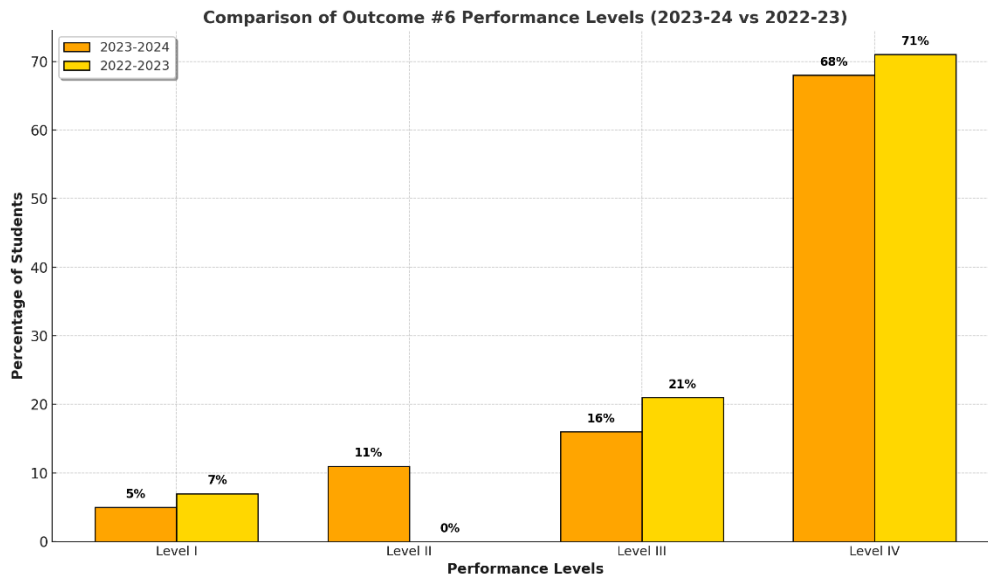
Level IV depicts a large improvement of 36% along with 21% improvement in Level III. No students scored at Level II, showing overall higher performance in this outcome.



Similar to PO #3, students improved significantly, with more scoring in Levels IV and III and none in Level II in 2023-2024.



This outcome shows a large improvement, with 32% more students scoring at Level IV in 2023-2024. Fewer students scored in the lower levels, indicating a notable improvement.



There was a drop in the percentage of students in 2023-24 across levels. This can be contributed to the change in the assessment tool.



THREE RIVERS COLLEGE

Teacher Education

Program Level SLO Report

Dr. Faye Sanders – Program Manager

2023-2024

Program Purpose Statement

The Associate of Arts in Teaching Degree (AAT) provides the opportunity to complete a Bachelor of Arts or Bachelor Science in Education at a participating four-year transfer institution in the state of Missouri. Any Missouri community college student who has earned an AAT degree from any Missouri community college is guaranteed consistent treatment by the four-year institution in accordance with the Missouri Coordinating Board for Higher Education (CBHE) Credit Transfer Policy, Principles of Best Practices and related addenda and clarifying comments.

Program Outcomes

1. **Content Knowledge Aligned with Appropriate Instruction**-The teacher understands the central concepts, structures, and tools of inquiry of the discipline(s) and creates learning experiences that make aspects of subject matter meaningful and engaging for students.
2. **Student Learning, Growth and Development**-The teacher understands how students learn, develop, and differ in their approaches to learning. The teacher provides learning opportunities that are adapted to diverse learners and supports the intellectual, social, and personal development of all students.
3. **Curriculum Implementation**-The teacher recognizes the importance of long-range planning and curriculum development. The teacher develops, implements, and evaluates curriculum based upon student, district, and state standards data.

4. **Critical Thinking**-The teacher uses a variety of instructional strategies and resources to encourage students' critical thinking, problem solving, and performance skills.
5. **Positive Classroom Environment**-The teacher uses an understanding of individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction, and self-motivation.
6. **Effective Communication**-The teacher models effective verbal, nonverbal, and media communication techniques with students, colleagues, and families to foster active inquiry, collaboration, and supportive interaction in the classroom.
7. **Student Assessment and Data- Analysis**-The teacher understands and uses formative and summative assessment strategies to assess the learner's progress and uses both classroom and standardized assessment data to plan ongoing instruction. The teacher monitors the performance of each student and devises instruction to enable students to grow and develop, making adequate academic progress.
8. **Professionalism**-. The teacher is a reflective practitioner who continually assesses the effects of choices and actions on others. The teacher actively seeks out opportunities to grow professionally to improve learning for all students.
9. **Professional Collaboration**-The teacher has effective working relationships with students, parents, school colleagues, and community members.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Teacher Education: Program Outcomes Mapping

Program Outcome 1:.	
Content Knowledge Aligned with Appropriate Instruction.	
<i>The teacher understands the central concepts, structures, and tools of inquiry of the discipline(s) and creates learning experiences that make aspects of subject matter meaningful and engaging for students</i>	
Course	Course Learning Outcome (CLO)
EDUC 230 Foundations of Education in a Diverse Society	#1. Analyze the historical, philosophical, and sociological foundations of schooling in the United States to understand their effects on current educational practices and issues.
	#3. Illustrate educational governance, funding, and organization at the local, state, and federal levels.

Program Learning Outcome #2
Student Learning, Growth, and Development.
<i>The teacher understands how students learn, develop, and differ in their approaches to learning. The teacher provides learning opportunities that are adapted to diverse learners and supports the intellectual, social and personal development of all students.</i>

EDUC 210: Educational Psychology	#1. Demonstrate teaching methodologies used to engage students in subject matter and use appropriate strategies to meet individual student needs.
EDUC 230: Foundations of Education in a Diverse Society	#4. Recognize classroom, school, and community culture influence on student relationships and the impact on the classroom environment and learning.

Program Learning Outcome #3

Curriculum Implementation.

The teacher recognizes the importance of long-range planning and curriculum development. The teacher develops, implements, and evaluates curriculum based upon student, district, and state standards data.

EDUC 270 Educational Technology	#1. Demonstrate competency in 21st century skills related to educational technology; specifically, social, ethical, legal, and human issues surrounding the use of technology to meet individual student needs.
	#2. Demonstrate methods, strategies, assistive and adaptive technology to maximize student learning among diverse learners, including English Language Learners.

Program Learning Outcome #4

Critical Thinking.

The teacher uses a variety of instructional strategies and resources to encourage students' critical thinking, problem solving, and performance skills.

EDUC 210: Educational Psychology	# 4. Demonstrate the use of formative and summative assessment strategies to guide informed educational decisions using collaborative data analysis processes.
EDUC 230 Foundations of Education in a Diverse Society	#2 Demonstrate differing philosophic views and their effect on approaches to learning.
	#5. Recognize legal and ethical practices and the influence of district policies and school procedures on professional practice.

Program Learning Outcome #5

Positive Classroom Environment.

The teacher uses an understanding of individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction, and self-motivation.

EDUC 210 Educational Psychology	#2 Demonstrate a basic knowledge of principles of human development and how those principles guide theories of learning.
	#3 Apply strategies to increase student motivation, multidimensional development, and academic achievement for all learners.
EDUC 230 Foundations of Education in a Diverse Society	#6. Recognize the characteristics of diverse student populations (including exceptionalities/at-risk) and identify appropriate strategies for student success.

Program Learning Outcome #6

Effective Communication.

The teacher models effective verbal, nonverbal, and media communication techniques with students, colleagues, and families to foster active inquiry, collaboration, and supportive interaction in the classroom.

EDUC 201 Teaching Profession w/Field Experience	#1 Demonstrate effective verbal and nonverbal communication techniques in an educational setting.
	#2. Analyze how effective teachers facilitate learner expression in speaking, writing, listening, and other media.

Program Learning Outcome #7

Student Assessment and Data Analysis.

The teacher understands and uses formative and summative assessment strategies to assess the learner's progress and uses both classroom and standardized assessment data to plan ongoing instruction. The teacher monitors the performance of each student and devises instruction to enable students to grow and develop, making adequate academic progress.

EDUC 270 Educational Technology	#3. Develop technology strategies to facilitate a variety of formative and summative assessment techniques.
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Program Learning Outcome #8

Professionalism.

The teacher is a reflective practitioner who continually assesses the effects of choices and actions on others. The teacher actively seeks out opportunities to grow professionally in order to improve learning for all students.

EDUC 201 Teaching Profession w/Field Experience	#4. Articulate the importance of reflective practice and continual professional growth.
EDUC 270 Educational Technology	#4 Demonstrate the use of technology to enhance personal and professional productivity.

Program Learning Outcome #9:

Professional Collaboration.

The teacher has effective working relationships with students, parents, school colleagues, and community members.

EDUC 201 Teaching Profession w/Field Experience	#3 Examine the importance of maintaining confidentiality of student records and communicating student progress to students, families, colleagues, and administrators.
	#5. Demonstrate methods to develop relationships with students, families, and communities in support of student learning.

Introduction

Program Student Learning Outcomes are measured by The Department of Elementary and Secondary Education Missouri Initial Professional Education Competencies. Program rubrics have been developed based upon the MIPEC standards. There are 9 program standards that describe the expectations for teacher education students. The MIPEC standards are the initial component of the Missouri Teacher Evaluation System, which is a continuum beginning at the undergraduate level and spanning throughout the career of the practicing educator.

The nine standards describe the expectations of a teacher education student at the community college level.

Program Outcomes # 1 Rubric

Content Knowledge Aligned with Appropriate Instruction-The teacher understands the central concepts, structures, and tools of inquiry of the discipline(s) and creates learning experiences that make aspects of subject matter meaningful and engaging for students.

Competency Areas	I	II	III	IV
Analyze the foundations of education and illustrate the effect on educational practices.	Provides a limited or unclear analysis of the foundations of education with minimal understanding of their impact on educational practices. Illustrates these effects with minimal clarity or accuracy.	Provides a basic analysis of the foundations of education with some understanding of their impact on educational practices. Illustrates these effects with some gaps or inaccuracies.	Provides a clear and accurate analysis of the foundations of education, showing a solid understanding of their impact on educational practices. Illustrates these effects clearly.	Provides a comprehensive and insightful analysis of the foundations of education, demonstrating a deep understanding of their impact on current educational practices. Illustrates these effects with exceptional clarity and detail.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 230	Foundations of Education in a Diverse Society	4	63	Sections 4 Students 63	1	YES

		I	II	III	IV	Total # of Students
Course	#	0	9	18	36	63
	%		14	29	57	

Assessment Results

Program Outcome #1 - Content Knowledge Aligned with Appropriate Instruction.

This outcome was assessed using writing assignments in EDUC 230 Foundations of Education. Students are required to research existing and historical finance, governance, and educational foundations.

Fifty-seven percent (n=36) of students scored in Level IV.

Twenty-nine percent (n=18) of students scored in Level III.

Fourteen percent (n=9) of students scored in Level II.

Analysis

The thirty-six students scoring successfully in Level IV for this outcome provided comprehensive analysis of educational foundations and were able to display their understanding of the impact of educational foundations on current educational practices.

The eighteen students scoring successfully in Level III for this outcome provided a basic analysis of educational foundations and their impact on education. The remaining students were unable to identify educational foundations and/or their impact on education, specifically the influence of financial governance. These students were unable to see the relationship of school funding and the services provided by the school.

Use of Results for Improvement

Students will continue to complete the writing assignments to demonstrate their analysis of educational foundations and their impact on education. The second writing assignment will be reviewed to determine if additional content should be added to the assessment tool for the analysis of the financial governance of public schools which was identified as an area of weakness in the educational foundations of education.

What is the proposed timeline for the change outlined above?

During the Spring 2025 semester the 2nd writing assignment will be reviewed.

Program Outcome # 2

Student Learning, Growth and Development. *The teacher understands how students learn, develop, and differ in their approaches to learning. The teacher provides learning opportunities that are adapted to diverse learners and support the intellectual, social, and personal development of all students.*

Competency Areas	I	II	III	IV
Demonstrates teaching methodologies and strategies to meet individual students needs and recognizes cultural influence.	Demonstrates minimal or ineffective teaching methodologies and strategies with limited focus on meeting individual student needs. Shows little awareness of cultural influences on student relationships and the learning environment.	Uses basic teaching methodologies and strategies that partially meet individual student needs. Shows some awareness of cultural influences on student relationships and the learning environment, but integration may be limited.	Demonstrates effective teaching methodologies and strategies that meet individual student needs. Recognizes and appropriately addresses cultural influences on student relationships and the learning environment.	Demonstrates advanced teaching methodologies and strategies that effectively meet the needs of all individual students. Exhibits a sophisticated understanding of cultural influences and integrates this knowledge to enhance the learning environment and student engagement.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 210	Educational Psychology	4	63	Sections 4 Students 63	2	Yes
EDUC 230	Foundations of Education in a Diverse Society	4	63	Sections 4 Students 63	1	Yes

			I	II	III	IV	Total # of Students
Course EDUC 210	#		15	22	17	9	63
	%		24	35	27	14	100
Course EDUC 230	#		0	9	18	36	63
	%		0	14	29	57	100

Assessment Results

Program #2 Student Learning, Growth, and Development

The outcome was assessed in EDUC 210 through the creation of a lesson plan. Students create a lesson plan which meets the needs of diverse learners. The outcome was assessed in EDUC 230 with a writing assignment. Students reflect on their own culture and the effect their culture had upon their education.

Thirty-six percent (n=45) scored IV.

Twenty-eight percent (n=35) scored III

Twenty-five percent (n=31) scored II

Eleven percent (n=15) scored I

Analysis

EDUC 210

The nine students in EDUC 210 scoring IV for PLO#2 created a lesson plan which demonstrated appropriate teaching strategies to meet the needs of diverse learners. The seventeen students scoring III for PLO #2 created a lesson plan with appropriate teaching strategies, but those strategies were not designed to meet the needs of diverse learners. The twenty-two students scoring II created a lesson plan with limited teaching strategies, of which only a few met the needs of diverse learners. The fifteen students scoring I created a lesson plan with only a basic teaching strategy.

EDUC 230

The thirty-six students in EDUC 230 scoring IV identified their own culture and appropriately reflected on the influence of their culture on their educational experience. The eighteen students scoring III were able to identify their culture but were unable to make a connection

between their culture and its effect on their educational experience. The nine students scoring II did not identify their culture and did not reflect on its influence.

Use of Results for Improvement

More data will be gathered on Program Outcome #2 before changes are made to curriculum or the assessment tools. Twenty-six students were enrolled in both EDUC 210 and EDUC 230 and were assessed for PLO #2. While these courses appear in the program grid in the same semester, a student can take either course at any time during the program.

It is possible that the EDUC 210 assessment tool needs to be revised, or that a specific component of the program learning outcome needs to be assessed rather than assessing the whole outcome.

The student learning outcomes mapped to Program Outcome #2 do not effectively align.

As a result of the assessment process, program assessment revision will begin.

What is the proposed timeline for the changes outlined above?

More data will be gathered during FY 25 for PLO #2 in both courses before any changes are made.

Program Learning Outcome #3 Rubric

Curriculum Implementation – The teacher recognizes the importance of long-range planning and curriculum development. The teacher develops, implements, and evaluates the curriculum.

Competency Areas	I	II	III	IV
Demonstrate technology skills and strategies to meet the needs of diverse learners	Demonstrates minimal or ineffective technology skills with little use of tools or strategies to meet the needs of diverse learners. Shows insufficient integration of technology in supporting learning and engagement.	Demonstrates basic technology skills and uses some tools and strategies to meet the needs of diverse learners. Shows limited integration of technology to support learning and engagement.	Demonstrates solid technology skills and uses appropriate tools and strategies to meet the needs of diverse learners. Integrates technology effectively to support learning and engagement.	Demonstrates advanced technology skills and utilizes a variety of innovative tools and strategies to effectively meet the needs of all diverse learners. Integrates technology seamlessly to enhance learning outcomes and engagement.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 270	Educational Technology	4	68	Sections 4 Students 68	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 270	#	0	10	23	35	68
	%		15	34	51	100

Assessment Results

Program Outcome #3 Curriculum Implementation.

PLO #3 was assessed in EDUC 270 Educational Technology with the Flipped Classroom Video Series.

Fifty-one percent (n=35) scored IV.

Thirty-four percent (n=23) scored III.

Fifteen percent (n=10) scored II.

The Flipped Classroom Video series is scored through a students' demonstration of both 21st Century technology skills and their ability to demonstrate those skills to meet the needs of diverse learners.

Analysis

The thirty-five students scoring IV in PLO #3 were able to demonstrate 21st Century technology skills that appropriately met the needs of diverse learners. The twenty-three students who scored III were able to demonstrate 21st Century technology skills but offered limited strategies to meet the needs of diverse learners. The ten students who scored II were able to demonstrate basic 21st Century technology skills but were unable to demonstrate those skills to appropriately meet the needs of diverse learners.

Use of Results for Improvement

The Flipped Classroom Video series will be continued in EDUC 270. The applications used throughout the semester that contribute to the flipped series will be examined to determine if the content needs to be revised to provide additional opportunities for students to design based upon the needs of diverse learners. The student learning outcomes mapped to Program Outcome #3 do not effectively align. As a result of the assessment process, program assessment revision will begin.

What is the proposed timeline for the changes outlined above?

Course content will be reviewed in the Spring 25 and Fall 25 semesters.

Program Outcome # 4

Critical Thinking. The teacher uses a variety of instructional strategies and resources to encourage students' critical thinking, problem solving, and performance skills.

Competency Areas	I	II	III	IV
Demonstrate technology and assessment strategies that guide educational decisions.	Demonstrates minimal or ineffective use of technology and assessment strategies to guide educational decisions. Shows limited ability to use tools and data to inform decisions, impacting the effectiveness of teaching and learning.	Demonstrates basic proficiency in using technology and assessment strategies to guide educational decisions. Uses some tools and data to inform decisions, but with limited effectiveness or integration.	Demonstrates strong proficiency in using technology and assessment strategies to guide educational decisions. Utilizes appropriate tools and data to make informed decisions that support student learning.	Demonstrates exceptional proficiency in using technology and assessment strategies to guide and enhance educational decisions. Uses advanced tools and data analysis to make informed and strategic decisions that significantly impact student learning outcomes.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 210	Educational Psychology	4	62	Sections 4 Students 62	2	Yes
EDUC 230	Foundations of Education in a Diverse Society	4	63	Sections 4 Students 63	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 210	#	24	14	18	6	62
	%	39	23	28	10	100
Course EDUC 230	#	0	9	18	36	63
	%	0	14	29	57	100

Assessment Results

Program Outcome #4 Critical Thinking.

PLO #4 is assessed in EDUC 210 through the design of formative and summative assessment in a lesson plan. Students in EDUC 230 create a philosophy of education and participate in a legal issues group assignment for the assessment of PLO #4.

Thirty-four percent (n=42) scored IV.

Twenty-nine percent (n=36) scored III.

Eighteen percent (n=23) scored II.

Nineteen percent (n=24) scored I.

Analysis

EDUC 210

The six students scoring IV created both an appropriate formative and summative assessment in their lesson plan. The eighteen students scoring III created an appropriate formative or summative assessment in their lesson plan. The fourteen students scoring II created a formative and/or summative assessment, but the assessment was inappropriate for the lesson plan created. The twenty-four students scoring I did not create a formative or summative assessment for the lesson plan.

EDUC 230

The thirty-six students scoring IV created an appropriate legal issues presentation with their group which reflected one or more philosophies of education. The eighteen students scoring III created an appropriate legal issues presentation, but the presentation did not reflect philosophical educational theories. The nine students scoring II created a legal issues presentation and detailed philosophical educational theories but did not connect the two areas.

Again, the assessment results are noticeably different between the two courses, EDUC 210 and EDUC 230. The assessment tool used in EDUC 210 needs to be reviewed to determine if revisions need to be made to instruction or perhaps that a component of the program outcome needs to be assessed separately from the whole of the outcome.

Use of Results for Improvement

The lesson plan assignment in EDUC 210 will be reviewed to determine if sufficient instruction is provided for both formative and summative assessment. In EDUC 230 the philosophy of education and the legal issues presentation will be divided and only the philosophy of education will be used as an assessment tool.

What is the proposed timeline for the changes outlined above?

EDUC 210 assessment tool will be reviewed in the Spring 25 and Fall 25 semesters. EDUC 230 course content will be revised Spring 25.

Program Outcome # 5

Positive Classroom Environment. The teacher uses an understanding of individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction, and self-motivation.

Competency Areas	I	II	III	IV
Demonstrate student motivation and student behavior modification strategies.	Fails to demonstrate strategies for student motivation or strategies for student behavior modification to promote an effective learning environment.	Demonstrates strategies for student motivation and/or strategies for student behavior modification but is unable to apply strategies to promote an effective learning environment.	Demonstrates strategies for student motivation or strategies for behavior modification to promote an effective learning environment but requires prompts or assistance.	Demonstrates strategies for student motivation and strategies for student behavior modification to promote an effective learning environment.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 210	Educational Psychology	4	62	Sections 4 Students 4	2	Yes
EDUC 230	Foundations of Education in a Diverse Society	4	62	Sections 4 Students 4	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 210	#	10	12	15	25	62
	%	16	19	25	40	100
Course EDUC 230	#	0	9	18	35	62
	%	0	15	29	56	100

Assessment Results

Students in EDUC 210 create a classroom management plan for the assessment of PLO #5. Students in EDUC 230 complete a writing assignment detailing diverse student populations and how to meet the needs of those students.

Forty-eight percent (n=60) scored IV.

Twenty-seven percent (n=33) scored III.

Seventeen percent (n=21) scored II.

Eight percent (n=10) scored I.

Analysis

EDUC 210

The twenty-five students scoring IV in PLO #5 were able to demonstrate basic knowledge of human development principles, how those principles guide learning, and apply strategies to increase student success. The fifteen students scoring III were able to demonstrate basic knowledge of human development, and how those principles guide learning but were unable to apply appropriate strategies to increase student success. The twelve students scoring II were able to demonstrate basic knowledge of human development and either discuss how those principles guide learning or were able to apply appropriate strategies to student success. The ten students scoring I were able to demonstrate basic knowledge of human development but were unable to describe how those principles guide learning and were not able to apply appropriate strategies to increase student success.

EDUC 230

The thirty-five students scoring IV in PLO #5 were able to recognize diverse student populations and identify appropriate strategies for student success. The eighteen students scoring III were able to recognize diverse student populations but were unable to identify appropriate strategies for student success. The nine students scoring II were unable to recognize diverse student populations and were unable to identify appropriate strategies for student success.

EDUC 230 data was very similar throughout the PLO assessment. It is possible that there is not enough distinction between the graded assignment and the assessment of the program outcomes. Data will be reviewed for this pattern during FY 25.

Use of Results for Improvement

The classroom management plan in EDUC 210 will be continued as the assessment tool for this program outcome. Data reveals consistent questions with the comparison of student data between EDUC 210 and EDUC 230. The assessment tool and outcome alignment will be further examined.

The writing assignment in EDUC 230 will be supplemented with the principles of universal design to assist students in their understanding of the needs of diverse students.

What is the proposed timeline for the changes outlined above?

Further examination of the assessment tool used in EDUC 210 will be conducted during the Spring 2025 and Fall 2025 semesters to determine if revision is needed. The supplemental instruction for EDUC 230 will be added during the Fall 2025 semester.

Program Outcome # 6

Effective Communication. The teacher models effective verbal, nonverbal, and media communication techniques with students, colleagues, and families to foster inquiry.

Competency Areas	I	II	III	IV
Demonstrate effective communication techniques in support of the learning environment.	Fails to demonstrate effective communication techniques in support of the learning environment.	Demonstrates effective communication techniques but is unable to apply techniques in support of the learning environment.	Demonstrates effective communication techniques in support of the learning environment but requires prompts or assistance.	Demonstrates communication techniques in support of the learning environment.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 201	Teaching Profession w/Field Experience	2	72	Sections 2 Students 72	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 201	#	0	14	26	32	72
	%	0	19	36	44	100

Assessment Results

Program Outcome #6 Effective Communication.

PLO #6 is scored using the Parent-Teacher Conference in EDUC 201. Students are scored on their ability to demonstrate effective verbal and nonverbal communication techniques and to reflect on how teachers facilitate learner expression.

Forty-four percent (n=32) scored IV.

Thirty-six percent (n=26) scored III.

Nineteen percent (14) scored II.

Analysis

The thirty-two students scoring IV were able to effectively demonstrate both verbal and nonverbal communication techniques during the PT conference and were able to reflect on those skills in narrative reflection. The twenty-six students scoring III were able to demonstrate verbal communication techniques, were able to appropriately reflect on those skills but did not demonstrate effective nonverbal communication techniques. The fourteen students scoring II were able to demonstrate both verbal and nonverbal communication techniques but were unable to reflect on those skills in narrative reflection.

Use of Results for Improvement

The parent teacher conference and narrative reflection will be continued in EDUC 201. The conference has been modified in Fall 2024 to include a second PT conference in midterm of the semester. Students need more opportunities to discuss their case study student to develop their communication skills and reflection.

What is the proposed timeline for the changes outlined above?

The additional conference has been added to the Fall 2024 semester.

Program Outcome # 7

Student Assessment and Data Analysis. The teacher understands and uses formative and summative assessment strategies to assess the learner's progress and uses both classroom and standardized assessment data to plan ongoing instruction. The teacher monitors the performance of each student and devises instruction to enable students to grow and develop, making adequate academic progress.

Competency Areas	I	II	III	IV
Demonstrate assessment strategies to plan instruction and ensure student success.	Fails to demonstrate effective assessment strategies to plan ongoing instruction and ensure student academic progress.	Demonstrates effective assessment strategies but is unable to use them to plan ongoing instruction and ensure student academic progress.	Demonstrates effective assessment strategies to plan ongoing instruction and ensure student academic progress but requires prompts or assistance.	Demonstrates effective assessment strategies to plan ongoing instruction and ensure student academic progress.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 270	Educational Technology	4	67	Sections 4 Students 67	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 270	#	0	10	23	34	67
	%	0	15	34	51	100

Assessment Results

Program Outcome #7 Student Assessment and Data Analysis.

Students are scored for PLO #7 through the Flipped Classroom video series where students create a lesson plan with formative and summative assessment.

Fifty-one percent (n=34) scored IV.

Thirty-four percent (n=23) scored III.

Fifteen percent (n=10) scored II.

Analysis

The thirty-four students scoring IV in PLO # 7 developed technology skills to facilitate both formative and summative assessment. The twenty-three students scoring III developed technology skills for formative and summative assessment but were unable to facilitate that assessment in their lesson plan. The ten students scoring II developed technology skills for formative or summative assessment but were unable to facilitate that assessment in their lesson plan.

Use of Results for Improvement

The assessment tools in EDUC 270 will be continued and examined during FY 25. It may be necessary to separate the components of the assessment tool and look at one piece of the assessment rather than the large project currently being used for assessment.

What is the proposed timeline for the changes outlined above?

Review will be continued throughout FY 25.

Program Outcome # 8

Professionalism. The teacher is a reflective practitioner who continually assess the effects of choice and actions on others. The teacher actively seeks out opportunities to grow professionally to improve learning for all students.

Competency Areas	I	II	III	IV
Recognize effects of personal choice, actions, and opportunities for growth on the learning environment.	Fails to recognize effects of personal choice, actions, and growth opportunities on the learning environment.	Recognizes personal choices, actions and growth opportunities but does not recognize their effect on the learning environment.	Recognizes the effects of choice, actions, and growth opportunities on the learning environment, but requires prompts or assistance.	Recognizes the effects of personal choice, actions, and growth opportunities on the learning environment.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 201	Teaching Profession w/Field Experience	2	72	Sections 2 Students 72	1	Yes
EDUC 270	Educational Technology	4	68	Sections 4 Students 68	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 201	#	0	14	26	32	72
	%	0	19	37	44	100
Course EDUC 270	#	0	0	30	38	68
	%	0	0	44	56	100

Assessment Results

EDUC 201 students participate in a six-week reflective practice activity to develop reflective practice for the classroom.

EDUC 270 students develop a professional learning community using digital applications.

Fifty percent (n=70) scored IV.

Forty percent (n=56) scored III.

Ten percent (n=14) scored II.

Analysis

EDUC 201

The thirty-two students scoring IV in PLO #8 were able to articulate the importance of reflective practice and continued professional development. The twenty-six students scoring III were able to identify the principles of reflective practice and professional development but were unable to articulate through reflection, their importance. The fourteen students scoring II were unable to identify either principles of reflective practice or professional development but were unable to articulate their importance.

EDUC 270

The thirty-eight students scoring IV in PLO #8 were able to demonstrate the use of technology to enhance personal and professional productivity. The thirty students scoring III were able to identify applications for use in the enhancement of personal and professional productivity but were not always able to demonstrate those applications.

Use of Results for Improvement

The professional learning community activity will be continued in EDUC 270 but will be modified to be used earlier in the semester which will allow the students to add to their learning community each module, rather than compiling the community at the end of the semester.

What is the proposed timeline for the changes outlined above?

During the Spring 2024 semester the professional learning community activity which is used as the assessment tool will be examined and reviewed. Any change made to the activity will be started in Fall 2025.

Program Outcome # 9

Professional Collaboration. The teacher has effective working relationships with students, parents, school colleagues, and community members.

Competency Areas	I	II	III	IV
Recognize the importance of effective working relationships with students, parents, colleagues, and community members.	Fails to recognize the importance of effective working relationships with students, parents, colleagues, and community members.	Recognizes working relationships with students or parents or colleagues or community members but fails to recognize their importance.	Recognizes the importance of effective working relationships with students, parents, colleagues, and community members, but requires prompts or assistance.	Recognizes the importance of effective working relationships with students, parents, colleagues, and community members.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	WEB Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EDUC 201	Teaching Profession w/Field Experience	3	72	Sections 2 Students 72	1	Yes

		I	II	III	IV	Total # of Students
Course EDUC 201	#	0	13	27	32	72
	%	0	18	38	44	100

Assessment Results

Program Outcome #9 Professional Collaboration

PLO #9 is assessed in EDUC 201 using the Parent Teacher conference activity.

Throughout thirteen weeks the students follow their case study student and develop skills for professional collaboration.

Forty-four percent (n=32) scored IV.

Thirty-eight percent (n=27) scored III.

Eighteen percent (n=13) scored II.

Analysis

The thirty-two students scoring IV in PLO #9 identified and demonstrated principles of student confidentiality, stakeholder communication, and methods to develop stakeholder relationships. The twenty-seven students scoring III were able to identify and demonstrate two of three rubric criteria. The thirteen students scoring II were able to identify principles of student confidentiality, stakeholder communication, and methods to develop stakeholder relationships but were not able to demonstrate those principles.

Use of Results for Improvement

The Parent Teacher conference activity will be continued in EDUC 201 with modifications. The conference has been modified in Fall 2024 to include a second PT conference in midterm of the semester. Students need more opportunity to discuss their case study student to develop their methods to develop stakeholder relationships.

What is the proposed timeline for the changes outlined above?

Prior semesters of assessment have shown that the PT Conference needs to be practiced, and the additional conference has been added to the Fall 2024 semester.

Additional Summary Notes

Anomalies in the results that were noticed:

Students in EDUC 210 Educational Psychology were the only students to score in the I rubric category in Program Learning Outcomes 2, 4, and 5, outcomes which are assessed in both EDUC 210 and EDUC 230. The assessment tool in EDUC 210 is a semester long project. The assessment tool in EDUC 230 is a written assignment. The EDUC 210 assessment tool will continue to be used as currently designed throughout the 2024-2025 academic year. The assessment tool will be examined to determine if the tool should be revised or if assessment should center on one component of the program learning outcome.

Were there any patterns in the data observed?

Assessment data for Program Learning Outcomes 1,2,4, and 5 in EDUC 230 are very similar. It is possible that the assessment tool cannot distinguish between the different outcomes and a different approach may need to be taken for the assessment of these outcomes.

Through program student learning outcome assessment, it has become clear that the current program assessment plan is ineffective. The current program assessment plan is based upon the Missouri Teacher Assessment Continuum as proposed by The Department of Elementary and Secondary Education, DESE. As a portion of the state-wide AAT program, all community colleges share the same student learning outcomes per EDUC course. These student learning outcomes are based upon the MIPEC standards which are the 2-year institution outcomes of the overall Missouri Teacher Assessment Continuum. It has become clear that these outcomes are not appropriate for the two-year community college courses because the continuum is written from the standpoint of a practicing classroom teacher.

As a result of the FY 24 assessment cycle and feedback provided in the SLIC committee feedback form, the following action items will be addressed for FY26:

- A full redesign of program learning outcomes.
- A full redesign of student learning outcomes in each EDUC course.
- A full redesign of program learning outcome rubrics.
- All EDUC courses will be mapped to the new program learning outcomes.
- In the FY 25 assessment period the current assessment plan will be used for Fall 24 and the new program assessment plan will be piloted in the Spring 25 semester. This will help to make the transition from the old assessment plan to the new assessment plan.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 20XX-XX SLO report. (Use as many pages as necessary to describe.)

EDUC 230 Student Learning Outcome #6 was assessed for the first time in Program Learning Outcome #5 due to the addition of the student learning outcome in Fall 23. The student learning outcome was added so that EDUC 230 Foundations of Education in a Diverse Society could qualify as a substitute certification training course. In addition, EDUC 230 was redesigned to meet the substitute certification requirements. The intended revisions from the 2021-2022 SLO report for EDUC 230 are no longer relevant.

Comparison of 2021-2022 SLO reporting cycle (no SLO report was completed for 2022-2023) and 2023-2024 reporting cycle:

PLO #1 - 4 percent decrease in students scoring III or above.
PLO #2 – 4 percent increase in students scoring III or above.
PLO #3: - 6 percent increase in students scoring III or above.
PLO #4- 4 percent decrease in students scoring III or higher.
PLO #5- 7 percent decrease in students scoring III or higher.
PLO #6 -7 percent decrease in students scoring III or higher.
PLO #7-14 percent increase in students scoring III or higher.
PLO #8 -6 percent decrease in students scoring III or higher.
PLO #9 -12 percent decrease in students scoring III or higher.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results*

of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.)

SLO data was not reviewed during the 2023-2024 reporting cycle because the Teacher Education program was participating in the college wide grid revision process. Data listed in Section 1 above is the comparison of data from the 2021-2022 reporting cycle to the 2023-2024 reporting cycle. Data from the 2023-2024 reporting cycle will be compared to the upcoming 2024-2025 reporting cycle to determine if there is any improvement in the number of students scoring III or higher in PLO's 1,4,5,6,8, and 9.



THREE RIVERS COLLEGE

**Associate of Applied Science in Information
Technology Specialist**

Program Level SLO Report

Michael W. Malone, Ph.D. – Program Manager

2023 - 24

Program Purpose Statement

The IT Specialist program prepares students for entry-level positions in the information technology field. IT Specialists work with the software and hardware of computer systems and networks, maintain and troubleshoot computer systems and networks, help install software and hardware, and provide customer service to end users within a network.

Program Outcomes

- Demonstrate the ability to verbally and nonverbally communicate in a professional manner.
- Apply skills learned to troubleshoot computer and network issues in a timely fashion.
- Demonstrate a foundational knowledge of computer systems, both hardware and software.
- Demonstrate a foundational knowledge of networking systems, both hardware and software.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The following curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

AAS in Information Technology Specialist: Program Outcomes Mapping

Program Outcome 1	
Demonstrate the ability to verbally and nonverbally communicate in a professional manner	
Course	Course Learning Outcome
MST 115: IT Essentials	Describe the internal components of a computer and assemble a computer system (CLO 1)
	Explain the purposes and use of operating systems on computers and mobile devices, including installation and navigation (CLO 2)
	Describe the basic types of security threats faced in today's Information Technology environment and how they may be addressed (CLO 5)
MST 117: Linux Essentials	Explain and show how to search and extract data from Linux files (CLO 8)
	Express a basic understanding of the concept of scripting. (CLO 9)
	List components of desktop and server computers. (CLO 10)
	Describe where data is stored on a Linux system. (CLO 11)
	Demonstrate how to query vital network settings for a Linux computer on a Local Area Network. (CLO 12)
	List and describe types of users on a Linux system. (CLO 13)
	Create users and groups on a Linux system. (CLO 14)

	Manage Linux file permissions and ownership. (CLO 15)
	Define and identify special Linux directories and file.(CLO 16)
MST 118: Networking I	Design, calculate, and apply subnet masks and addresses to fulfill given requirements in IPv4 and IPv6 networks (CLO 4)
MST 128: Networking II	Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols (CLO 3)
MST 135: Customer Service and Support	Recognize the importance of and demonstrate effective and professional verbal and written communication in a business/information technology environment. (CLO 1)
	Create professional documents and presentations relative to the information technology industry. (CLO 2)
	Describe troubleshooting theory and solve problems using the troubleshooting process. (CLO 3)
	Describe and demonstrate good customer service skills. (CLO 4)
MST 217: Network Security	Define information security and explain why it is important (CLO 1)
	Identify the areas of security vulnerability in a distributed computing environment (CLO 2)
	Identify vulnerabilities and misconfigurations in major wireless network technologies (CLO 3)
	Develop a Network Security Plan (CLO 4)
MST 219: Server Administration II	Explain the role of directory services in a network (CLO 1)
MST 227: Introduction to Programming	Explain the software Development Life Cycle (CLO 4)
	Create programs that solve contemporary problems (CLO 5)
MST 235: IT Practicum and Survey	Design and plan a Microsoft Active Directory instance. (CLO 2)
	Design, configure, and implement network switch installation using subnets and VLANs. (CLO 4)
	Design and implement network security measures on servers and switches (CLO 5)
	Define and implement a role-based security model and permissions in the classroom lab environment. (CLO 8)
	Develop and communicate an IT infrastructure plan including components, costs, and implementation steps required, appropriate for a business management review. (CLO 9)
MST 297: Coordinated Internship	Participate in a structured internship based in a workplace and receive real world, hands-on experience. (CLO 1)

Program Outcome 2:

Apply Skills Learned to troubleshoot computer and other network issues

MST 115: IT Essentials	Troubleshoot hardware and software problems using tools and diagnostic software (CLO 4)
	Describe considerations for choosing an operating system (CLO 2)

MST 117: Linux Essentials	Demonstrate and use help commands and navigate help systems when using Linux. (CLO 6)
MST 118: Networking I	Build a small ethernet network with security best practices (CLO 6)
	Troubleshoot connectivity in a small network (CLO 7)
MST 128: Networking II	Configure and troubleshoot VLANs and Inter-VLAN routing applying security best practices (CLO 1)
	Configure and troubleshoot redundancy on a switched network using STP and EtherChannel (CLO 2)
	Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols (CLO 3)
	Configure dynamic address allocation in IPv6 networks (CLO 4)
MST 135: Customer Service and Support	Describe troubleshooting theory and solve problems using the troubleshooting process (CLO 3)
	Describe and demonstrate good customer service skills (CLO 4)
MST 217: Network Security	Define information security and explain why it is important (CLO 1)
	Identify the areas of security vulnerability in a distributed computing environment. (CLO 2)
	Identify vulnerabilities and misconfigurations in major wireless network technologies. (CLO 3)
MST 228: Networking III	Explain optimization, monitoring, and troubleshooting techniques in scalable network architectures (CLO 6)
MST 235: IT Practicum and Survey	Design and plan a Microsoft Active Directory instance (CLO 2)
	Design, configure, and implement a network switch installation using subnets and VLANs (CLO 4).
	Design and implement network security measured on servers and switches. (CLO 5)
	Troubleshoot server operation and network connectivity issues using lab environments created in the classroom. (CLO 6)
	Configure and implement a Microsoft Hyper-V hypervisor and virtual machines for Windows Server using Command Line (CLO 7)
	Define and implement a role-based security model and permissions in the classroom lab environment. (CLO 8)
	Develop and communicate an IT infrastructure plan including components, costs, and implementation steps required, appropriate for a business management review. (CLO 9)
MST 297: Coordinated Internship	Participate in a structured internship based in a workplace and receive real-world, hands-on experience. (CLO 1)

Program Outcome 3:

Demonstrate a foundational knowledge of computer systems both hardware and software

MST 115: IT Essentials	Describe the internal components of a computer and assemble a computer system (CLO 1)
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	Explain the purposes and use if operating systems on computers and mobile devices, including installation and navigation (CLO 2)
MST 117: Linux Essentials	Define and Identify Linux as an operating system (CLO 1)
	Describe considerations for choosing an operating system (CLO2)
	Describe the basics of open-source software and licensing (CO 3)
	Demonstrate basic knowledge of working with Linux (CLO 4)
	Demonstrate and use basic Linux command line skills (CLO 5)
	Demonstrate and use help commands and navigate help systems when using Linux (CLO 6)
	Demonstrate how to work with Linux files and directories (CLO 7)
	Explain and show how to search and extract data from Linux file (CLO 8)
	Express a basic understanding of the concept of scripting (CLO 9)
	List components of desktop and server computers (CLO 10)
	Describe where data is stored on Linux computers (CLO 11)
	Demonstrate how to query vital network settings for a Linux computer on a Local Area Network (CLO 12)
	List and describe types of users on a Linux system (CLO 13)
	Create users and groups on a Linux system (CLO 14)
	Manage Linux file permissions and ownership (CLO 15)
	Define and identify special Linux directories and files (CLO 16)
MST 118: Networking I	Build a small Ethernet network with security best practices (CLO 6)
MST 217: Network Security	Identify the areas of security vulnerability in a distributed computing network (CLO 2)
	Identify vulnerabilities and misconfigurations in major wireless network technologies (CLO 3)
MST 218: Server Administration I	Install and administer Windows Server (CLO 1)
	Manage Windows Server (CLO 2)
	Install and configure server roles (CLO 3)
	Configure storage and file systems (CLO 4)
	Implement server virtualization (CLO5)
MST 219: Server Administration II	Install, manage, and maintain Active Directory instances (CLO 2)
	Create and manage Group Policies (CLO 3)
	Configure Active Directory environments with multiple domains (CLO 4)
	Implement a Digital Certificate solution (CLO 5)
	Implement a single sign-on solutions (CLO 6)
	Implement Rights Management (CLO 7)
MST 227: Introduction to Programming	Apply the basics of programming in a high-level language, including data types, control structures, algorithm development, and program design with functions. (CLO 1)
	Apply the principles of Object-Oriented Programming (OOP). (CLO 2)
	Use the common data structures in programming, including strings, arrays, lists, files, and dictionaries (CLO 3)

	Explain the software development life cycle (CLO 4)
	Create programs that solve contemporary problems (CLO 5)
MST 235: IT Practicum and Survey	Troubleshoot server operation and network connectivity issues lab environments created in the classroom (CLO 6)
	Develop and communicate an IT infrastructure plan including components, costs, and implementation steps required appropriate for a business management review (CLO 9)
MST 297: Coordinated Internship Project	Participate in a structured internship based in the workplace and receive real world, hands-on experience (CLO 1)

Program Outcome 4:	
Demonstrate a foundational knowledge of networking systems both hardware and software	
MST 115: IT Essentials	Connect to the Internet and share resources in a networked environment (CLO 1)
MST 117: Linux Essentials	Demonstrate and use basic Linux command line skills (CLO 5)
MST 118: Networking I	Configure switches and end devices to provide access to local and remote network resources (CLO 1)
	Explain how physical and data link layer protocols support the operation of Ethernet in a switched network (CLO 2)
	Configure routers to enable end-to-end connectivity between remote devices (CLO 3)
	Design, calculate, and apply subnet masks and addresses to fulfil given requirements in IPv4 and IPv6 networks. (CLO 4)
	Describe how the upper layers of the OSI model support network applications (CLO 5)
MST 128: Networking II	Configure and troubleshoot VLANs and Inter-VLAN routing applying security best practices (CLO 1)
	Configuring and troubleshoot redundancy on a switched network using STP and EtherChannel (CLO 2)
	Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols (CLO 3)
	Configure dynamic address allocation in IPv6 networks (CLO 4)
	Configure WLANs using a WLC and L2 best security practices (CLO 5)
	Configure switch security to mitigate LAN attacks (CLO 6)
	Configure IPv4 and IPv6 static routing on routers (CLO 7)
MST 228: Networking III	Configure single-area OSPFv2 in both point-to-point and multiaccess networks (CLO 1)
	Explain how to mitigate threats and enhance network security using access control lists and security best practices (CLO 2)
	Implement standard IPv4 ACLs to filter traffic and secure administrative access (CLO 3)

	Configure NAT services on the edge router to provide IPv4 address scalability (CLO 4)
	Explain techniques to provide address scalability and secure remote access for WANs (CLO 5)
	Explain the implementation of Quality of Service in networking devices (CLO 7)
	Implement protocols to manage the network (CLO 8)
	Recognize the importance of technologies such as virtualization, software defined networking, and automation affect evolving networks (CLO 9)
MST 217: Network Security	Identify the areas of security vulnerability in a distributed computing network (CLO 2)
	Identify vulnerabilities and misconfigurations in major wireless network technologies (CLO 3)
	Develop a Network Security Plan (CLO 3)
MST 218: Server Administration I	Configure storage and file systems (CLO 4)
MST 219: Server Administration II	Explain the role of directory services in a network (CLO 1)
MST 220: Server Administration III	Configure TCP/IP on Windows Server (CLO 1)
	Implement DNS, DHCP, and IPAM (CLO 2)
	Implement Remote Access solutions (CLO 3)
	Configure Distributed File Systems (CLO 4)
MST 235: IT Practicum and Survey	Configure Windows Server and its various roles (CLO 1)
	Design and plan a Microsoft Active Directory instance (CLO 2)
	Install, configure, and manage Microsoft Windows Server infrastructure for Active Directory, file/print, DNS, Exchange, DHCP, Network Printing, and Remote Access (CLO 3)
	Design, configure, and implement network switch installation using subnets and VLANs (CLO 4)
	Design and implement network security measures on servers and switches (CLO5)
	Configure and implement a Microsoft Hyper-V hypervisor and virtual machines for Windows Server using command line.
	Define and implement a role-based security model and permissions in the classroom environment (CLO 8)
	Develop and communicate an IT infrastructure plan including components, costs, and implementation steps required appropriate for a business management review (CLO 9)
MST 297: Coordinated Internship	Participate in a structured internship based in a workplace and receive real world, hands-on experience. (CLO 1)

Introduction

This is the first Student Learning Outcomes Report performed on the Information technology since the curriculum went through a major revision in Spring 2021. While this revision did not involve any changes in the Learning Objectives for the program, it did require a comprehensive remapping of course objectives to program objectives. This required a reworking of the assessment process including the development of new assessment rubrics.

While not fully tested yet, this assessment process does present us with some baseline data that can be used to refine the process going forward.

Program Outcomes Rubric

Competency Areas	I	II	III	IV
Demonstrate the ability to verbally and nonverbally communicate in a professional manner.	Does not communicate with users and colleagues	Communicates but has trouble getting concepts across to both users and colleagues	Usually communicates effectively with users and colleagues in both technical and non-technical terms.	Communicates effectively with users and colleagues in both technical and non-technical terms
Apply skills learned to troubleshoot computer and network issues in a timely fashion.	Demonstrates minimal, non-existent, or ineffective troubleshooting techniques	Demonstrates effective troubleshooting on a small subset of problems	Effectively troubleshoots most problems with a few gaps	Demonstrates systematic, effective troubleshooting techniques on a variety of problems
Demonstrate a foundational knowledge of computer systems, both hardware and software.	Demonstrates severely limited knowledge of computer systems	Demonstrates foundational knowledge of computer systems but with large gaps in knowledge	Demonstrates foundational knowledge of computer systems with some gaps in knowledge.	Demonstrates wide foundational knowledge of computing systems
Demonstrate a foundational knowledge of networking systems, both hardware and software.	Demonstrates severely limited knowledge of networking systems	Demonstrates foundational knowledge of networking systems but with large gaps in knowledge	Demonstrates foundational knowledge of networking systems with some gaps in knowledge.	Demonstrates wide foundational knowledge of networking systems

Program Outcome #1

Demonstrate the ability to verbally and nonverbally communicate in a professional manner.

This Outcome has been divided into 3 sub-outcomes for assessment purposes

Sub-area	I	II	III	IV
1a. Formal writing	Fails to effectively communicate using formal writing, with extensive errors in grammar and usage	Demonstrates low-level communication with a moderate number of errors in grammar and usage	Demonstrates effective communication with some grammatical and usage errors	Demonstrates effective communication in formal writing, with proper grammar and usage
1b. Technical Language	Fails to use appropriate technical language when communicating with peers	appropriate technical language at least 30% of the time when communicating with peers Us	Uses appropriate technical language at least 75% of the time when communicating with peers	Demonstrates excellent use of appropriate technical language when communicating with peers
1c. Informal Language.	Is unable to convey technical concepts using non-technical language	Communicates but must often explain technical language used	Communicates technical concepts well in but still uses some technical language without explanation	Demonstrates superior ability to communicate technical concepts using non-technical language

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MST 235	IT Practicum & Survey	1	3	1/3	1	Yes
MST 297	Coordinated Internship Project II	1	4	1	1	Yes

	Outcome		I	II	III	IV	Total # of Students
Course MST 235	1a.	#		1	2		3
		%		33%	67%		100%
	1b.	#		2	1		3
		%		67%	33%		100%
	1c.	#		3			3
		%		100%			100%
Course MST 297	1a.	#	Not assessed in this course				
		%					
	1b.	#	1	1	1	1	4
		%	25%	25%	25%	25%	100%
	1c.		1		1	2	4
			25%		25%	50%	100%

Assessment Results

Students in MST 235 were assessed through three assignments in which students had to design a simple network system for a small company. One assignment was a written proposal. In two assignments the students had to present their proposal to the class. Each assignment was used to measure one of the three sub-outcomes.

Students in MST 297 were also assessed by their internship supervisor, usually an IT Manager. Each sub-outcome was presented as a separate question on the evaluation form. However, because of time constraints in developing the assessment form, the rubric was not yet developed. The internship supervisors were simply asked to rate the intern on a on a Likert-like scale from 1 (worst) to 4 (best). Students were assessed on sub-outcomes 1b (technical communication with peers) and 1c (communication with users), but not on 1a (written communication), since interns are not often given opportunities to present written communications.

Five students were enrolled, with one supervisor not returning an assessment form. Of the four students for which evaluations were returned, one scored in Category I, one in Category III, and two in category IV.

Analysis

The program has perhaps not focused as heavily on communication early in the process as it should have. SCOM 110 Public Speaking is a required course for this program, so students are already exposed to the principles and practice of communication. However, the early semesters have primarily focused on technical content and not on communicating that content to others. One course, MST 135 Customer Service and Support, does have a communications element in it, but communication is not expressly reinforced in other courses, other than in discussion posts.

Use of Results for Improvement

We will continue to monitor this outcome. However, changes will not be made at this time. We will be focusing instead on improving Learning Outcome #2 (Troubleshooting). However, to improve the quality of the assessment, internship supervisors in MST 297 will be provided with the full rubric.

What is the proposed timeline for the changes outlined above?

Rubrics will be supplied to the internship supervisors to record scores at the end of the internship period in the Spring semester of 2025.

Program Outcome #2

Apply skills learned to troubleshoot computer and network issues in a timely fashion.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MST 235	IT Practicum & Survey	1	3	1/3	1	Yes
MST 297	Coordinated Internship Project II	1	4	1/4	1	Yes

		I	II	III	IV	Total # of Students
MST 235	#	0	3	0	0	3
	%	0%	100%	0%	0%	3
MST 297	#	0	0	3	1	4
	%	0%	0%	75%	25%	100%

Assessment Results

Students in MST 235 were assessed via an assignment in which they had to troubleshoot a network that contained at least three issues, some on individual PCs and some network-related. All three students needed a clue to help in finding at least one issue, although once each issue was known they had no trouble correcting it.

Students in MST 297 were assessed by their internship supervisor, usually an IT Manager. However, because of time constraints in developing the assessment form, the internship supervisors were not provided with the full rubric and simply asked to rate the intern on a Likert-like scale from 1 (worst) to 4 (best). Five students were enrolled, with one supervisor not returning an assessment form. Three students (75%) fell into category III, while one (25%) fell into category IV (best).

Analysis

The three students in MST 235 that were assessed were not doing their internships during Spring 2024 as they had done them previously. These students had all taken more than 4 semesters to complete their coursework, and so had not necessarily had opportunity to review or reinforce troubleshooting skills in the previous semester. This gap between learning and assessment could be causing issues for the students.

Also, although the assessment process is not set up to differentiate between troubleshooting computer and troubleshooting network, it seemed to the program manager that students were more successful in troubleshooting computer issues rather than network issues. This could be because students deal with computers in their daily lives but do not have day-to-day dealings with network issues unless they are already employed in the industry. It might be useful to split this outcome into two sub-outcomes, one for troubleshooting computers and one for troubleshooting networks.

Students in MST 297 were all on schedule with their course progressions, which shows in their higher scores for this outcome. However, the supervisors did not have the full rubric.

Use of Results for Improvement

For those students who, for whatever reason, are taking longer to complete their degree than the standard two years, we need to provide some opportunities to reinforce and refresh trouble shooting skills. This will likely be a review of troubleshooting techniques (networking in particular) at the beginning of MST 235. We will also be examining earlier courses (MST 118 and MST 128, for instance) to see if a heavier emphasis on troubleshooting is needed. To improve the quality of the assessment, the program manager will consult with the Office of Institutional Effectiveness with regard to assessing Outcome #2 as two sub-

outcomes. Also, supervisors for MST 297 internships will be provided with the rubric to use in assessing their interns.

What is the proposed timeline for the changes outlined above?

A review of troubleshooting techniques will be added to the beginning of MST 235 in Spring of 2026. The internship supervisors will receive the full rubric at the end of the internship period in Spring 2025. The program manager will consult with IE about using two sub-outcomes before the end of the assessment period for 2024-2025. Throughout 2024-2025 we will consider ways troubleshooting skills might be more effectively built in the earlier courses.

Program Outcome #3

Demonstrate a foundational knowledge of computer systems, both hardware and software.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MST 235	IT Practicum & Survey	1	3	1/3	1	Yes
MST 297	Coordinated Internship Project II	1	4	¼	1	Yes

		I	II	III	IV	Total # of Students
MST 235	#	0	0	3	0	3
	%	0%	0%	100%	0	3
MST 297	#	0	1	2	1	4
	%	0%	25%	50%	25%	100%

Assessment Results

In MST 235, students were assigned specifications for a computer network. They were required to gather equipment from storage and build the network to the specification. This assignment had both a computer (hardware) component and a network component. For this program outcome, students were rated on the completeness and operability of the computer component. All three students (100%) rated in category IV (excellent).

Students in MST 297 were assessed by their internship supervisor, usually an IT Manager. However, because of time constraints in developing the assessment form, the internship supervisors were not provided with the full rubric and simply asked to rate the intern on a Likert-like scale from 1 (worst) to 4 (best). Five students were enrolled, with one supervisor not returning an assessment form. One student (25%) fell into category II, two students (50%) fell into category III, while one (25%) fell into category IV (best).

Analysis

Students show generally excellent knowledge while in a classroom situation. Students in internships, however, show a more normal distribution. Once again, the internship supervisors did not receive the full assessment rubric.

Use of Results for Improvement

This outcome will continue to be monitored as we are focusing our attention on improving results in Outcome #2.

To improve the quality of the assessment, supervisors for MST 297 internships will be provided with the rubric to use in assessing their interns.

What is the proposed timeline for the changes outlined above?

The internship supervisors will receive the full rubric in the internship period of Spring 2025.

Program Outcome #4

Demonstrate a foundational knowledge of networking systems, both hardware and software.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MST 235	IT Practicum & Survey	1	3	1/3	1	Yes
MST 297	Coordinated Internship Project II	1	4	1/4	1	Yes

		I	II	III	IV	Total # of Students
MST 235	#	0	0	3	0	3
	%	0%	0%	100%	0%	3
MST 297	#	0	1	2	1	4
	%	0%	25%	50%	25%	100

Assessment Results

In MST 235, students were assigned specifications for a computer network. They were required to gather equipment from storage and build the network to the specification. This assignment had both a computer (hardware) component and a network component. For this program outcome, students were rated on the completeness and operability of the network component. All three students (100%) rated in category III.

Students in MST 297 were assessed by their internship supervisor, usually an IT Manager. However, because of time constraints in developing the assessment form, the internship supervisors were not provided with the full rubric and simply asked to rate the intern on a Likert-like scale from 1 (worst) to 4 (best). Five students were enrolled, with one supervisor not returning an assessment form. One student (25%) fell into category II, two students (50%) fell into category III, while one (25%) fell into category IV (best).

Analysis

Once again, students exhibited a high level of knowledge in the classroom, with more “normal” distribution in the internship workplace. Students do appear to be retaining knowledge through the two-year program.

Use of Results for Improvement

We will continue to monitor this outcome but will be focusing attention on Outcome #2 (Troubleshooting) over the coming months.

To improve the quality of the assessment, supervisors for MST 297 internships will be provided with the rubric to use in assessing their interns.

What is the proposed timeline for the changes outlined above?

The internship supervisors will receive the full rubric in the internship period of Spring 2025.

Additional Summary Notes

Anomalies in the results that were noticed:

This is the first Student Learning Outcomes report for the current curriculum, so it is too soon to expect to be able to identify anomalies.

Were there any patterns in the data observed?

No patterns were detected, possibly because of the small sample size.

Addendum

Program Changes:

This is the first Student Learning Outcomes Report since the program modifications approved in the Spring 2021. The major program revision was approved by the Curriculum Committee, taking effect in Fall 2021. This program revision was industry-driven. The program uses the Cisco CCNA curriculum for networking courses, and the Microsoft Server curriculum for our server courses. In their last revisions of their curricula, Cisco reduced the number of their courses from four to three, and Microsoft increased the number of courses from two to three. The result was no net change in the number of courses, but still required extensive program revision as follows:

- MST 118 Introduction to Networks was renamed Networking I and revised use Version 7 of the Cisco Curriculum. The basic content did not change.
- MST 128 Routing and Switching was renamed Networking II and revised to use Version 7 of the Cisco Curriculum. The basic content did not change.
- MST 197 Coordinated Internship Project I was removed from the grid and replaced with ENGR 198 Workplace Readiness, per the Advisory Committee (minutes attached).
- MST 218 Server Administration was renamed Server Administration I and was revised to use the newer Microsoft Server 2016 curriculum. The course was also moved to an online modality.
- MST 219 Advanced Server Administration was renamed Server Administration II and was revised to use the newer Microsoft Server 2016 curriculum. The course was also moved to an online modality.
- MST 220 Server Administration II was created to cover the material in the new third course in the Microsoft Server 2016 curriculum. It was created to be taught in an online modality.
- MST 225 Scaling Networks was discontinued due to the elimination of the corresponding Cisco course.
- MST 226 Connecting Networks was discontinued due to the elimination of the corresponding Cisco course.
- MST 228 Networking III was created to cover the material in the new third course in the Cisco curriculum, which covers much of the material that was once contained in MST 225 and MST 226.

In 2022 a change was made (taking effect in Fall 2023) in the One-Year Certificate program with the consent of the advisory board. MST 217 Network Security was removed as not necessary for the one-year students. It was replaced with MST 218 Server Administration I. This change also brought the One-Year Certificate into closer alignment with the AAS degree, allowing a smoother transition.



THREE RIVERS COLLEGE

Manufacturing Technology AAS

Program Level SLO Report

Gregory Watts – Program Manager

2023 - 2024

Program Purpose Statement

Career and Technical Education. The Manufacturing Technology program focuses on the knowledge and skills necessary for industrial maintenance and technology career paths. Manufacturing focused skills students will learn include electrical systems, robotics, print reading, programmable controller systems, mechatronics, hydraulics and pneumatics, computer aided machining, quality assurance, automation systems, networking, and welding.

Program Outcomes

- Develop the knowledge and skills to safely work with electrical and mechanical equipment.
- Develop troubleshooting skills using standard test equipment and interpreting technical drawings.
- Demonstrate knowledge of equipment and process operations.
- Program and monitor industrial PLCs (Programmable Logic Control).
- Understand the design and operation of hydraulic and pneumatic systems.
- Demonstrate an understanding of robotics and automation.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Manufacturing Technology: Program Outcomes Mapping	
Program Outcome 1:	
Develop the knowledge and skills to safely work with electrical and mechanical equipment.	
Course	Course Learning Outcome (CLO)
ELEC 115 Applied DC & AC Circuits	Define fundamental principles of electronics and electricity, recognize basic schematic symbols, letter designations, and units of measure for the fundamental electronic parameters, describe basic component functions, waveforms and their physical interfaces.
ELEC 117 Industrial Electrical Controls	Define fundamental industrial control circuits and their use in advanced manufacturing and industrial environments.
MAFT 215 Mechatronics Capstone	Demonstrate proper manufacturing safety procedures in an industrial setting.
MAFT 119 Robotics I	Describe proper manufacturing safety procedures in an industrial robotic setting.
MAFT 219 Robotics II	Demonstrate proper manufacturing safety procedures in an industrial robotic setting.
Program Outcome 2:	
Develop troubleshooting skills using standard test equipment and interpreting technical drawings.	
Course	Course Learning Outcome (CLO)
MEDR 135 Blueprint Reading and Gauging	Demonstrate an understanding of print reading terminology and terms associated with dimensioning and tolerancing.
	Interpret information contained in the title block and drawing notes.
	Identify and locate information about specific features of a part in different views presented on the print and different line types and tolerancing.
ELEC 115 Applied DC & AC Circuits	Test and evaluate basic circuit functions using basic test equipment and troubleshooting techniques.

ELEC 117 Industrial Electrical Controls	Test and Evaluate control circuits using basic test equipment and troubleshooting techniques.
ELEC 207 Industrial Electronics Applications	Perform test and evaluation of common circuits using basic test equipment and troubleshooting techniques.
	Interpret basic digital and analog circuit functions based on the schematic representation of common fundamental circuits.
ELEC 216 Programmable Controller Systems	Test and evaluate software programs using standard test equipment and trouble-shooting technique.
MAFT 215 Mechatronics Capstone	Differentiate, troubleshoot, and correct problems in the automation system based upon information gained through multimeter readings and computer software.
MAFT 255 Hydraulics & Pneumatics	Analyze circuit function using basic troubleshooting techniques.
MAFT 219 Robotics II	Differentiate, troubleshoot, and correct problems in a robotic integrated circuit based upon information gained through instrumented readings and computer programming software.

Program Outcome 3:

Demonstrate knowledge of equipment and process operations.

Course	Course Learning Outcome (CLO)
ELEC 117 Industrial Electrical Controls	Recognize basic schematic symbols, letter designations, and functions of electrical, motor, and mechanical devices.
	Describe basic component functions and their uses in industrial applications. Interpret basic control circuit functions based on the control circuit line (ladder) and wiring diagrams.
ELEC 207 Industrial Electronics Applications	Name and describe the operation of fundamental electronic devices used in both digital and analog systems.
	Recognize basic schematic symbols, letter designations, and functions of basic digital and analog devices used in electronic circuits.
MAFT 255 Hydraulics & Pneumatics	Interpret fluid power circuits.
	Describe component function.
MEDR 246 Computer Aided Machining I	Identify and use the fundamental concepts, terms, tools, and practices of CAM.
	Apply characteristics of CAM software and systems design in the evaluation of CAM software and activities in the course.
	Use computer systems to develop machine tool language programs and make changes on existing programs and basic G-code language.
	Students will be capable of developing 2D and 3D machine tool language programs.
	Students will learn limited machine tool operation and machining techniques.

Program Outcome 4:

Program and monitor industrial PLCs.

Course	Course Learning Outcome (CLO)
	Describe the operation of a Programmable Logic Controller (PLC) system.

ELEC 216 Programmable Controller Systems	Recognize and describe the operation of the major components of a PLC system.
	Describe the use of number systems used in the programming of a PLC system.
	Describe the software instruction set for the SLC family of processors.
	Create a software program to be downloaded and run on a PLC system.
MAFT 215 Mechatronics Capstone	Define electronic circuits, switches, programmable logic controls and their uses as it relates to mechanized industrial automation systems.
	Demonstrate programming moves in single units as well as hand shaking of multiple automation and robotic stations.
Program Outcome 5:	
Understand the design and operation of hydraulic and pneumatic systems.	
Course	Course Learning Outcome (CLO)
MAFT 255 Hydraulics & Pneumatics	Define core concepts of fluid power.
	Recognize fluid power symbols in circuit drawings.
	Describe component function.
	Interpret fluid power circuits.
Program Outcome 6:	
Demonstrate an understanding of robotics and automation.	
Course	Course Learning Outcome (CLO)
MAFT 119 Robotics I	Describe proper manufacturing safety procedures in an industrial robotic setting.
	Describe the multi-axis coordinate systems used in robotic technologies
	Demonstrate use of the teach pendant to input robot commands, to provide fundamental controls relating to mechanized industrial automation systems.
	Describe end-of-arm-toolings available and their applications in a modern manufacturing environment.
	Describe the physics of robotic motion and hand shaking of multiple automation and robotic stations.
MAFT 219 Robotics II	Investigate the applications of multi-axis robotic in a modern manufacturing application.
	Demonstrate the proper usage of the teach pendant to program a multi-axis robot to interact with other industrial technologies to create a functioning industrial circuit.
	Differentiate, troubleshoot, and correct problems in a robotic integrated circuit based upon information gained through instrumented readings and computer programming software.
MAFT 215 Mechatronics Capstone	Define electronic circuits, switches, programmable logic controls and their uses as it relates to mechanized industrial automation systems.
	Demonstrate programming moves in single units as well as hand shaking of multiple automation and robotic stations.
MAFT 267 Automated Manufacturing Systems	Student will be able to identify the major components and characteristics of a Computer-Integrated-Manufacturing System including: product planning, production engineering, manufacturing planning, flexible vs. fixed manufacturing, and lean manufacturing concepts.
	Student will be able to explain H/W and S/W based programming tools and equipment to analyze fundamental aspects of automation technologies.

Introduction

Assessment Approach: Manufacturing Technology courses utilize Amatrol's interactive learning modules. The course instructor applies an analytic rubric for each Program Learning Outcome to student process and products related to selected Amatrol modules and their associated hands-on applications.

(<https://amatrol.com/>)

Manufacturing Technology Assessment Plan				
Program Learning Outcome	Outcome #	TRC Course	Amatrol Module	Amatrol Application
Develop the knowledge and skills to safely work with electrical and mechanical equipment.	1.a Electrical Safety	ELEC 117, Industrial Electrical Controls	W17448-XB00JEN-E1, Electrical Wiring Systems	#2 Wiring Electrical Panels
	1.b Mechanical Safety	ELEC 207, Industrial Electronics Applications	EB240-BC00UEN-E1, Industrial Electronics	#5 Discrete Sensing Devices
Develop troubleshooting skills using standard test equipment and interpreting technical drawings.	2.a Test Equipment	ELEC 115, Applied DC and AC Circuits	VB227-BD00UEN-E1, AC/DC Electrical Systems	#2 Electrical Measurement
	2.b Technical Drawings	ELEC 117, Industrial Electrical Controls	W17448-XB00JEN-E1, Electric Wiring systems	#1 Introduction to Electrical Control Wiring
Demonstrate knowledge of equipment and process operations.	3	MEDR 246, Computer Aided Machining	WXPE102-XX00XEN-E3, Principles of Machining Centers	#3 CNC Programming and Operation
Program and monitor industrial PLCs.	4	ELEC 216, Programmable Controller Systems	W25005-BB00UEN-E1, PLC System-Allen Bradley L16/Studio 5000	#2 Programmable Controller Operation
				#5 PLC Motor Control
				#8 PLC Timer Instructions
Understand the design and operation of hydraulic and pneumatic systems	5	MAFT 255, Hydraulics & Pneumatics	VB831-XC00UEN-E1, Basic Hydraulics	#2 Basic Hydraulic Circuits
			VB780-AA00AEN-E1, Basic Pneumatics	#7 Basic pneumatic Circuits
Demonstrate an understanding of robotics and automation	6	MAFT 219, Robotics II	E11302-CD00XEN-E2, Flexible Manufacturing Systems 1	#1 Introduction to Flexible Manufacturing Systems
		MAFT 215, Mechatronics Capstone		#2 Point to-Point Assembly

Program Outcomes Rubric

Program Outcome #1				
Develop the knowledge and skills to safely work with electrical and mechanical equipment.				
Competency	I	II	III	IV
Electrical Safety	Student requires constant supervision to work safely with electrical equipment.	Student requires periodic supervision to work safely with electrical equipment.	Student is able to work safely with electrical equipment with minimal supervision.	Student is able to work safely with electrical equipment without supervision.
Mechanical Safety	Student requires constant supervision to work safely with mechanical equipment.	Student requires periodic supervision to work safely with mechanical equipment.	Student is able to work safely with mechanical equipment with minimal supervision.	Student is able to work safely with mechanical equipment without supervision.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ELEC 117	Industrial Electrical Controls	1	1	1/1	1 FT	Yes
ELEC 207	Industrial Electronics Applications	1	5	1/5	1 FT	Yes

		I	II	III	IV	Total # of Students
ELEC 117	#				1	1
	%				100%	
ELEC 207	#		1	1	3	5
	%		20%	20%	60%	

Assessment Results

The majority meets or exceeds expectations for this outcome.

Analysis

ELEC 207 – Success Rate 85%.

Same measures were piloted in 2022-2023. In that collection, there were 5 students in ELEC 117, where 60% scored Lvl 2. With only 1 student in the current cycle, there is an insufficient number of students from which to draw a conclusion but it appears that more individualized mentoring and feedback provided in the current cycle has had a positive impact.

Use of Results for Improvement

Instructor / Peer mentoring of Cat 2 student will be formalized. Student partnering has positive results and will continue to be encouraged.

Will look for opportunities to expand partnering Lvl 4 students with < Lvl 3 students.

What is the proposed timeline for the changes outlined above?

Experimented with partnering in 2023-2024 and will continue moving forward.

Program Outcome #2

Develop troubleshooting skills using standard test equipment and interpreting technical drawings.

Competency	I	II	III	IV
Test Equipment	Student can identify standard test equipment and name functions.	Student can appropriately use standard test equipment.	Student understands significance and implications of test equipment output.	Student can use test equipment output to troubleshoot system and process errors.
Technical Drawings	Student can recognize basic conventions and symbols used in technical drawings.	Recognize components and functions represented in technical drawings.	Student understands function and workflow represented in technical drawings.	Student can Interpret technical drawings for the purpose of troubleshooting systems.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ELEC 117	Industrial Electrical Controls #1	1	1	1/1	1 FT	Yes
ELEC 117	Industrial Electrical Controls #2	1	1	1/1	1 FT	Yes

		I	II	III	IV	Total # of Students
ELEC 117 #1	#			1		1
	%			100%		
ELEC 117 #2	#			1		1
	%			100%		

Assessment Results

Students satisfactorily meet core expectations with room for improvement.

Analysis

Students achieved 75% success rate. In prior year, the majority of students did not meet expectations. The increase in success rate may be attributed to mentoring and individualized feedback for < Lvl 3 students.

Use of Results for Improvement

Practice exercises to improve Category 3 to Category 4. These exercises add depth to the existing course work.

What is the proposed timeline for the changes outlined above?

Beginning in Fall of 2024, practice exercises are being made available. Because of low sample size, additional monitoring will be necessary to determine the exact number and placement of additional exercises needed to consistently achieve a satisfactory result.

Program Outcome #3

Demonstrate knowledge of equipment and process operations.

Competency	I	II	III	IV
Equipment and Process Operations	Identify (or recognize) components and basic concepts.	Describe basic manufacturing component functions.	Demonstrate limited equipment and process operation.	Explain the fundamental operation of electronic and mechanical devices in manufacturing process.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MAFT 215	Mechatronics Capstone	2	3	2/3	1FT	Yes

		I	II	III	IV	Total # of Students
MAFT 215	#	1		1	1	3
	%	33%		33%	33%	

Assessment Results

The majority meets or exceeds expectations. Success rate = 66.7%

Analysis

A performance gap between students was observed in this cycle.

Use of Results for Improvement

Support and basic skills for Category 1 student, enhancement for Category 3 student. For the Category 1 student, attendance and initiative are factors contributing to the low result. Instructor / Peer mentoring is shown to be crucial for Category 1 students.

What is the proposed timeline for the changes outlined above?

We began partnering in Spring 2024, going forward from that time.

Program Outcome #4

Program and monitor industrial PLCs.

Competency	I	II	III	IV
Programming PLCs	Define basic terminology and major components used in programmable logic controls.	Describe uses and functions of programmable logic controls.	Create software programs for programmable logic control systems.	Troubleshoot and edit programmable logic systems.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
ELEC 216	Programmable Controller Operation #2	2	5	2/5	1 FT	Yes
ELEC 216	Programmable Controller Operation #5	2	2	2/4	1 FT	Yes
ELEC 216	Programmable Controller Operation #8	2	4	2/4	1 FT	Yes

		I	II	III	IV	Total # of Students
ELEC 216 #2	#	1	2	1	1	5*
	%	20%	40%	20%	20%	
ELEC 216 #5	#			1	1	2**
	%			50%	50%	
ELEC 216 #8	#	1	1	1	1	4
	%	25%	25%	25%	25%	

*One student withdrew after the initial assessment.

**Two students failed to complete assignment #5.

Assessment Results

Six students meet or exceed core expectations. For this set of assessments, five student scores are below proficiency.

Analysis

The four-level spread of skills reinforces the fact this is a difficult course. For the pilot of these assessments in 2023-2024, all the students scored Lvl 2 or below. Increased individualized mentoring in 2024-2025 seemed to benefit student performance. Students find PLC terminology and connectivity more difficult. This challenge occurs early in the course allowing opportunities for structured intervention and assignment of application partnering.

Use of Results for Improvement

Support and skill-building for students below Category 3 will be increased. Enhancement exercises in terminology and connectivity will be encouraged for students at Category 2 or below.

What is the proposed timeline for the changes outlined above?

Monitor student progress in 2024-2025 to identify best places in curriculum to place additional exercises and implement exercises in 2025-2026. Continue individualized mentoring going forward.

Program Outcome #5

Understand the design and operation of hydraulic and pneumatic systems.

Competency	I	II	III	IV
Hydraulic / Pneumatic Systems	Identify components and core concepts of	Describe component function in fluid power systems.	Execute setup of fluid power components.	Interpret and explain fluid power systems.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MAFT 255	Basic Hydraulic Circuits #2	2	4	2/4	1 FT	Yes
MAFT 255	Basic Pneumatic Circuits #7	2	4	2/4	1 FT	Yes

		I	II	III	IV	Total # of Students
Course	#			2	2	4
	%			50%	50%	
Course	#			2	2	4
	%			50%	50%	

Assessment Results

Students are meeting or exceeding proficiency. Pilot of 2023-2024 showed similar results.

Analysis

Distribution is split 50/50 between the top 2 categories. Success rate = 87.5 %

Use of Results for Improvement

Provide individualized feedback for Cat 3 students. Address common weaknesses for targeted training exercises.

What is the proposed timeline for the changes outlined above?

Student performance by this outcome shows consistency and for the present, improvement on Outcomes 2, 3, and 6 will be prioritized.

Program Outcome #6

Demonstrate an understanding of robotics and automation.

Competency	I	II	III	IV
Automation	Identify components and basic concepts in Computer-Integrated-Manufacturing Systems.	Define components and basic concepts in Computer-Integrated-Manufacturing Systems.	Demonstrate set up and programming for Computer-Integrated-Manufacturing Systems.	Differentiate, troubleshoot, and correct problems in a Computer-Integrated-Manufacturing System.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
MAFT 215	Mechatronics Capstone	2	4	2/4	1 FT	Yes
MAFT 219	Robotics II	2	4	2/4	1 FT	Yes

		I	II	III	IV	Total # of Students
Course	MAFT 215	1		1	2	4
	%	25%		25%	50%	
Course	MAFT 219	1	2	1		4
	%	25%	50%	25%		

Assessment Results

The four-level spread of skills reinforces the fact this is a difficult course.

Analysis

Four students met or exceeded core expectations. Four students are below proficiency. Students struggle with applications by scenario for demonstration of understanding.

Use of Results for Improvement

Instructor support and skill-building for students below Category 3. Enhancement exercises should be provided for students above Category 2. We need to start with simpler scenarios that can be built upon to increase understanding of more complex scenarios.

What is the proposed timeline for the changes outlined above?

Beginning in Spring of 2025, students will start with simpler scenarios to build upon going forward. We will continue to look for ways to improve student performance in MAFT 219.

Additional Summary Notes

Anomalies in the results that were noticed:

There are twice as many Category 3 and Category 4 students as there are Category 1 and Category 2. This shows improvement from the pilot collection of 2022-2023. Sample size is small, close monitoring is necessary. Individualized mentoring and peer partnering in the labs show improvements in almost all areas.

Were there any patterns in the data observed?

Due to the small number of students in these assessments, it's difficult to find any patterns.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 2018-19 SLO report. (Use as many pages as necessary to describe.)

Begin Text Here.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

Begin Text Here.



THREE RIVERS COLLEGE

Nursing AAS

Program Level SLO Report

Laura McElroy – Program Manager

2023 - 2024

Program Purpose Statement

Career and Technical Education. The purpose of this nursing program is to prepare students to achieve an Associate of Applied Science degree, to apply for licensure by examination* as a registered nurse, and to use the nursing process in providing safe and effective nursing care for clients in structured primary or secondary care settings.

*The requirements for licensure, as set forth in the Missouri Statutes 335 RSMo 2022 the Nurse Practice Act, include being of good moral character, completion of the high school course of study or the equivalent, successful completion of the basic professional nursing curriculum in an approved school of nursing (however, successful completion does not guarantee eligibility to take the licensure examination). *Non-English-speaking candidates are required to submit evidence of proficiency in the English language. There are also questions related to adjudication of any crime other than traffic violations, including unlawful use or possession of controlled substances or alcoholic beverages to an extent that one is impaired, fraud, dishonesty, acts of violence, bribery, deception, misconduct, insanity, incompetence, and placement on employee disqualification lists by a state or federal agency. Affirmative answers may result in the applicant being denied access to the licensure examination by the State Board of Nursing. For further information, consult the department chair.

Program Outcomes

- Develop personal responsibility for professionalism, education, and scope of practice.
- Choose effective communication strategies while collaborating with patients, significant support person, and interdisciplinary members of the healthcare team.
- Evaluate critical thinking and clinical decision-making to provide safe, patient-centered care.
- Apply evidence-based practice while recognizing the role of quality improvement in the healthcare system.
- Select appropriate information and technology in the management of patient care.

The last major revision to the program outcomes was in 2015-2016 as part of an action plan to improve student outcomes. The program is approved by the Missouri State Board of Nursing (MOSBN) and is accredited by the Accreditation Commission for Education in Nursing (ACEN), both of which mandate faculty-driven curriculum (MOSBN, 2023) and reflect current standards and practices of authorities within the nursing field (ACEN, 2023). Therefore, the outcomes were developed by faculty to guide students to develop attributes and traits necessary for the nursing professional. Faculty relied on multiple resources including the Missouri Nurse Practice Act, Missouri State Board of Nursing Minimum Standards, National League for Nursing Competencies for Graduate Nurses, Quality and Safety Education for Nurses (QSEN), and the NCLEX test plan to ensure consistency with standards of contemporary nursing throughout development of the end-of-program student learning outcomes. The faculty believe that the attainment of the program outcomes and the end of program student learning outcomes “represent the point of transition from being a student to being an entry-level practitioner” (<https://www.acenursing.org/acen-accreditation-manual-glossary/>, 2023).

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Nursing: Program Outcomes Mapping

Program Outcome 1:	
Develop personal responsibility for professionalism, education, and scope of practice	
NCLEX Category: Management of Care	
Course	Course Learning Outcome (CLO)
NURS 108: RN Bridge-Updated	Compare the professional nurse and the qualified health professional scopes of practice. (CLO 2)
NURS 116: Foundations in Nursing-Updated	Identify interventions to promote safe patient-centered care. (CLO 1)
NURS 239: Clinical Preceptor- Updated	Organize prioritization of care to a variety of patients while maintaining a safe and effective healthcare environment. (CLO 1)
NURS 245: Transition into Professional Nursing-Updated	Prepare for the role of a professional nurse as a leader in the healthcare system. (CLO 1)
	Formulate an individualized plan to address required areas of improvement for success on the NCLEX-RN. (CLO 4)

Program Outcome 2:	
Choose effective communication strategies while collaborating with patients, significant support person, and interdisciplinary members of the healthcare team.	
NCLEX Category: Health Promotion, Psychosocial Integrity	
Course	Course Learning Outcome (CLO)
NURS 108: RN Bridge-Updated	Apply effective communication skills to relate to the patient and other members of the health care team. (CLO 3)
NURS 116: Foundations of Nursing-Updated	Recognize the nurse's role in providing culturally competent care to the patient and significant support persons. (CLO 2)
	Explain health promotion strategies while educating the patient and caregivers. (CLO 3)
	Apply effective communication skills in the healthcare setting. (CLO 5)
NURS 128: Mental Health Nursing- Updated	Utilize therapeutic verbal and non-verbal communication to interact with individuals and groups of clients. (CLO 1)
	Explain the role of interdisciplinary healthcare team in providing care for clients with mental disorders. (CLO 2)
NURS 129: Medical-Surgical Nursing I -Updated	Recognize various roles within the healthcare team. (CLO 6)
NURS 218: Maternal Child Health Nursing- Updated	Apply the nursing process to variances in sexuality, family dynamics, and reproduction. (CLO 1)
NURS 219: Medical-Surgical II Nursing- Updated	Practice in the role of a nurse as a member of the healthcare team. (CLO 6)
NURS 238: Medical Surgical III- Updated	Manage patient care as a member of the healthcare team. (CLO 6)
NURS 239: Clinical Preceptor- Updated	Choose effective communication strategies within the healthcare team to provide quality, patient-centered care. (CLO 3)

Program Outcome 3:	
Evaluate critical thinking and clinical decision making to provide safe, patient-centered care.	
NCLEX Category: Psychosocial Integrity, Pharmacological and Parenteral Therapies, Physiological Adaptation, Reduction of Risk Potential, Safety and Infection Control, Basic Care and Comfort	
Course	Course Learning Outcome
NURS 108: RN Bridge-Updated	Utilize the nursing process with introductory medical surgical concepts. (CLO 1)
	Describe how critical thinking, ethics, collaboration, and the use of evidence-based practice supports the growth of the professional nurse. (CLO 4)
NURS 116: Foundations of Nursing-Updated	Recognize the nurse's role in providing culturally competent care to the patient and significant support persons. (CLO 2)

	Identify interventions to promote safe, patient-centered care. (CLO 1)
	Recognize populations at risk for alterations in health. (CLO 4)
NURS 128: Mental Health Nursing- Updated	Describe safe and effective nursing care of clients with mental disorders. (CLO 3)
NURS 129: Medical-Surgical Nursing I- Updated	Relate patient care to alterations in introductory medical surgical concepts. (CLO 1)
	Demonstrate introductory medical surgical knowledge and skills in the clinical setting. (CLO 2)
	Apply the nursing process to care for patients with alteration in introductory medical surgical concepts. (CLO 3)
	Relate previous conceptual knowledge to introductory medical surgical concepts. (CLO 5)
	Recognize the nurse's role in providing safe, individualized patient-centered care. (CLO 6)
NURS 135: Pharmacology in Nursing- Updated	Apply the nursing process to enhance safe medication administration. (CLO 1)
	Use pharmacology based reference materials to enhance safe medication administration. (CLO 3)
NURS 218: Maternal Child Health Nursing- Updated	Manage potential risks while providing safe patient care of maternal and pediatric clients. (CLO 2)
NURS 219: Medical-Surgical II Nursing- Updated	Relate patient care to alteration in advanced medical surgical concepts. (CLO 1)
	Demonstrate advanced medical surgical knowledge and skills in clinical decision-making. (CLO 2)
	Manage patient response to alterations in advanced medical surgical concepts. (CLO 3)
	Relate previous conceptual knowledge to advanced medical surgical concepts. (CLO 4)
	Analyze the nurse's role in providing safe, prioritized, patient-centered care within a team environment. (CLO 5)
NURS 238: Medical Surgical III- Updated	Apply patient care to alteration in advanced medical surgical concepts. (CLO 1)
	Demonstrate advanced medical surgical knowledge and skills in clinical decision-making. (CLO 2)
	Predict patient responses to alterations in advanced medical surgical concepts. (CLO 3)
	Relate previous conceptual knowledge to advanced medical surgical concepts. (CLO 4)
	Evaluate the nurse's role in providing safe, patient-centered care within a team environment. (CLO 5)
NURS 239: Clinical Preceptor-Updated	Organize prioritization of care to a variety of patients while maintaining a safe and effective healthcare environment. (CLO 1)
NURS 245: Transition into Professional Nursing- Updated	Evaluate nursing judgments in the clinical setting. (CLO 3)

Program Outcome 4:	
Apply evidence-based practice while recognizing the role of quality improvement in the healthcare system.	
NCLEX Category: Management of Care	
Course	Course Learning Outcome (CLO)
NURS 108: RN Bridge-Updated	Describe how critical thinking, ethics, collaboration, and the use of evidence-based practice supports the growth of the professional nurse. (CLO 4)
NURS 116: Foundations of Nursing-Updated	Utilize foundational concepts as it relates to nursing practice. (CLO 6)
NURS 128: Mental Health Nursing- Updated	Use evidence-based interventions to promote health of clients with mental disorders. (CLO 4)
NURS 135: Pharmacology in Nursing- Updated	Recognize the pharmacotherapeutic effects of drug classifications. (CLO 2)
NURS 218: Maternal Child Health Nursing- Updated	Utilize evidence-based practice to educate the maternal and pediatric client. (CLO 3)
NURS 239: Clinical Preceptor- Updated	Demonstrate evidence-based clinical decision-making within the scope of practice for the professional nurse. (CLO 2)
NURS 245: Transition into Professional Nursing-Updated	Examine health care process to improve quality and safety in patient care. (CLO 2)

Program Outcome 5:	
Select appropriate information and technology in the management of patient care.	
NCLEX Category: N/A Integrated throughout the curriculum	
Course	Course Learning Outcome (CLO)
NURS 135: Pharmacology in Nursing-Updated	Interpret laboratory values to determine effectiveness and safety of drug therapy. (CLO 4)
NURS 218: Maternal Child Health Nursing- Updated	Demonstrate knowledge of information and technology as it relates to the maternal and pediatric client. (CLO 4)
NURS 239: Clinical Preceptor- Updated	Select technology and informatics to promote patient-centered care. (CLO 4)

Introduction

In 2023, the assessment plan was updated after the analysis and discussion of the assessment tools revealed:

- Lack of clarity regarding pre-existing ELA (Expected Level of Achievement) parameters and definitions.
- Lack of correlation between ELAs and external post-graduate success (employer surveys, NCLEX pass rates).
- Delay between identifying weaknesses and the ability to make changes timely.

The program is required to measure outcomes in a variety of ways. The program utilizes two tools to measure program outcomes. One measures cognitive performance, and the other measures psychomotor performance.

1. HESI Exit Exam (Cognitive)- Provides detailed performance on concepts that have been mapped to the curriculum and are based on the national required exam-National Council Licensing Exam (NCLEX). The concept categories are present on the curriculum mapping table and labeled as “NCLEX Category”. The specific ELA was established after faculty observed trending data that showed that when student performance was highest, 50% or higher of the cohort benchmarked at 850 or higher in Version 1 of the Exit HESI. Students take at least six of these proctored achievement exams throughout the program. The Exit HESI is comprehensive and contains data from all categories. Test items are application or higher to match the NCLEX. NCLEX categories can be further divided into subcategories. When low performance is identified in major categories, faculty can disaggregate data identify subcategories that may need improvement. Subcategory scores contribute to the overall total score within a HESI Exit NCLEX Category.

2. Clinical Evaluations (Psychomotor)-Each clinical evaluation tool has competencies that are mapped to program outcomes. Scores are collected, totaled, and averaged for each clinical rotation in the last semester. Clinical evaluations were assessed as a measurement tool after faculty noticed lowest performing cohorts had missed clinical rotations related to COVID restrictions. After collecting and reviewing preliminary data, it was decided that clinical performance was a strong predictor in student success.

Below is the evaluation Plan for SLO Report

SLO ASSESSMENT PLAN		
End of Program Student Learning Outcomes	Assessment Method Frequency of Analysis	Expected Level of Achievement (ELA) Rationale
Outcome	Measure	ELA
Program Outcome #1	HESI Exit Exam Category: Management of Care	55% or more of students will meet the benchmark (850) for each end-of-program student learning outcome. Additional HESI Data is collected throughout the program. Low scores are identified so that they may be reinforced to improve program outcomes and HESI Exit exams.
	Clinical Evaluation (NURS-238)	Each outcome for clinical performance will be 80% or better.
	Clinical Evaluation (NURS-239)	
Program Outcome #2	HESI Exit Exam Category: Psychosocial Integrity	55% or more of students will meet the benchmark (850) for each end-of-program student learning outcome. Additional HESI Data is collected throughout the program. Low scores are identified so that they may be reinforced to improve program outcomes and HESI Exit exams.
	HESI Exit Exam Category: Health Promotion	
	Clinical Evaluation (NURS-238)	Each outcome for clinical performance will be 80% or better.
	Clinical Evaluation (NURS-239)	
Program Outcome #3	HESI Exit Exam Category: Psychosocial Integrity	55% or more of students will meet the benchmark (850) for each end-of-program student learning outcome. Additional HESI Data is collected throughout the program. Low scores are identified so that they may be reinforced to improve program outcomes and HESI Exit exams.
	HESI Exit Exam Category: Pharmacological and Parenteral Therapies	
	HESI Exit Exam Category: Physiological Adaptation	
	HESI Exit Exam Category: Reduction of Risk Potential	
	HESI Exit Exam Category: Safety and Infection Control	

	HESI Exit Exam Category: Basic Care and Comfort	
	Clinical Evaluation (NURS-238)	Each outcome for clinical performance will be 80% or better.
	Clinical Evaluation (NURS-239)	
Program Outcome #4	HESI Exit Exam Category: Management of Care	55% or more of students will meet the benchmark (850) for each end-of-program student learning outcome. Additional HESI Data is collected throughout the program. Low scores are identified so that they may be reinforced to improve program outcomes and HESI Exit exams.
	Clinical Evaluation (NURS-238)	Each outcome for clinical performance will be 80% or better.
	Clinical Evaluation (NURS-239)	
Program Outcome #5	Clinical Evaluation (NURS-238)	Each outcome for clinical performance will be 80% or better.
	Clinical Evaluation (NURS-239)	

Program Outcomes Rubrics

HESI Exams				
Competency	I	II	III	IV
All Outcomes	Less than 800	Between 800 and 850	Between 850 and 1000	Above 1000
	Indicates the student is unlikely to pass NCLEX on first attempt.	Indicates the student may to pass NCLEX on first attempt.	Indicates the student is likely to pass NCLEX on first attempt.	Indicates the student is very likely to pass NCLEX on first attempt.

Clinical Evaluations				
Competency	I	II	III	IV
All Outcomes	U-NS	U-NI	P	S
	Student performance is unsafe.	Student performance is unsatisfactory and needs improvement	Student is progressing and is nearing professional level competency; requires minimal to moderate prompting but safe.	Student successfully demonstrated professional level competency, and functions independently.

Program Outcome #1

Develop personal responsibility for professionalism, education, and scope of practice.

HESI Exit Exam Category: Management of Care					
Cohort	I	II	III	IV	Total
PBB 23 EX	3	2	4	4	13
	23.1%	15.4%	30.8%	30.8%	
PBD 23 EX	6	4	4	7	21
	28.6%	19.0%	19.0%	33.3%	
SKB 23 EX	11	1	2	10	24
	45.8%	4.2%	8.3%	41.7%	
PBM 23 EX	5	5	9	5	24
	20.8%	20.8%	37.5%	20.8%	

HESI Exit Exam Category: Management of Care					
Cohort	I	II	III	IV	Total
PBB 24 EX	0	2	1	11	14
	0.0%	14.3%	7.1%	78.6%	
PBD 24 EX	0	0	4	16	20
	0.0%	0.0%	20.0%	80.0%	
SKB 24 EX	0	0	2	17	19
	0.0%	0.0%	10.5%	89.5%	

Clinical Tracking NURS-238					
Cohort	I	II	III	IV	Total
Sikeston	0	0	0	20	20
	0%	0%	0%	100%	
PBB Dec Grad	0	0	2	12	14
	0%	0%	14%	86%	
PBD May Grad	0	0	0	20	20
	0%	0%	0%	100%	

Clinical Tracking NURS-239					
Cohort	I	II	III	IV	Total
Sikeston	0	0	0	19	19
	0%	0%	0%	100%	
PBB Dec Grad	0	0	2	12	14
	0%	0%	14%	86%	
PBD May Grad	0	0	1	19	20
	0%	0%	5%	95%	

Assessment Results

Concepts within Program Outcome 1 (PO#1) contribute to professional development and the role transition from student to graduate nurse. Communication, health disparities, and

healthcare law are examples of the initial concepts that students learn early in the program. Students expand on these concepts throughout the program. By the final semester, students incorporate all previous knowledge into developing a professional identity and applying knowledge to manage comprehensive care. The students reach the highest level of understanding in NURS 245: Transition into Professional Practice. As previously stated, major curriculum changes went into effect between 2023 and 2024. The 2023 cohorts had more students that scored in the lower rubric levels when compared to students in the 2024 cohorts. When totaled, 45/82 (54.9%) of students met or exceeded the ELA for PO#1 in 2023. By 2024, 51/53 (96%) of students met or exceeded the established ELA.

Clinical tracking was still being evaluated and normed during 2023. The first full cohort data collection occurred for the 2024 cohort and reflects a strong correlation with the HESI Exit data for the same cohort.

Analysis

The difference between the 2023 cohorts and the 2024 cohorts can be attributed to the curriculum changes made in 2023. Since changes were made prior to the 2024 cohorts taking NURS 245: Transition into Professional Practice, the 2024 cohort was able to benefit from those changes.

Use of Results for Improvement

Evaluation of changes is initially positive; however, curriculum changes are not yet complete. More insight will be gained after the old curriculum has been fully phased out.

What is the proposed timeline for the changes outlined above?

The first cohort that will experience the completely revised curriculum started fall of 2023 and will graduate in May of 2025. The data collected from this cohort will better reflect the changes made and will allow for more direct evaluation of student achievement.

Program Outcome #2

Choose effective communication strategies while collaborating with patients, significant support person, and interdisciplinary members of the healthcare team.

HESI Exit Exam Category: Psychosocial Integrity					
Cohort	I	II	III	IV	Total
PBB 23 EX	8	0	2	3	13
	61.5%	0.0%	15.4%	23.1%	
PBD 23 EX	8	0	9	4	21
	38.1%	0.0%	42.9%	19.0%	
SKB 23 EX	6	2	7	9	24
	25.0%	8.3%	29.2%	37.5%	
PBM 23 EX	8	3	6	8	25
	32.0%	12.0%	24.0%	32.0%	

HESI Exit Exam Category: Psychosocial Integrity					
Cohort	I	II	III	IV	Total
PBB 24 EX	2	3	1	8	14
	14.3%	21.4%	7.1%	57.1%	
PBD 24 EX	6	3	7	4	20
	30.0%	15.0%	35.0%	20.0%	
SKB 24 EX	7	1	3	8	19
	36.8%	5.3%	15.8%	42.1%	

HESI Exit Exam Category: Health Promotion					
Cohort	I	II	III	IV	Total
PBB 23 EX	5	1	3	4	13
	38.5%	7.7%	23.1%	30.8%	
PBD 23 EX	12	2	3	4	21
	57.1%	9.5%	14.3%	19.0%	
SKB 23 EX	7	1	3	13	24
	29.2%	4.2%	12.5%	54.2%	
PBM 23 EX	11	1	8	5	25
	44.0%	4.0%	32.0%	20.0%	

HESI Exit Exam Category: Health Promotion					
Cohort	I	II	III	IV	Total
PBB 24 EX	3	0	5	6	14
	21.4%	0.0%	35.7%	42.9%	
PBD 24 EX	6	0	1	13	20
	30.0%	0.0%	5.0%	65.0%	
SKB 24 EX	3	1	5	10	19
	15.8%	5.3%	26.3%	52.6%	

Clinical Tracking NURS-238					
Cohort	I	II	III	IV	Total
Sikeston	0	0	0	20	20
	0%	0%	0%	100%	

PBB Dec Grad	0	0	5	9	14
	0%	0%	36%	64%	
PBD May Grad	0	0	5	15	20
	0%	0%	25%	75%	

Clinical Tracking NURS-239					
Cohort	I	II	III	IV	Total
Sikeston	0	0	1	18	19
	0%	0%	5%	95%	
PBB Dec Grad	0	0	3	11	14
	0%	0%	21%	79%	
PBD May Grad	0	0	2	18	20
	0%	0%	10%	90%	

Assessment Results

Students gain an understanding of communication and patient centered care in the first semester, they practice applying the knowledge in diverse settings beginning in geriatrics, then lower-level acute care, maternal-child, public health, mental health, and then by the third semester-higher level urgent/emergent/progressive care. During the final semester, students are able to develop more independent and collaborative relationships with interdisciplinary personnel as they work in clinicals completely without instructors for 120 hours. For this outcome, the psychosocial NCLEX category was selected because it is communication-dependent and focuses on differences in appropriate communication strategies for general public health or for patients who are experiencing alterations in medical health or mental health. Health promotion was selected as a concept to represent PO#2 because it includes building relationships with patients and providing individualized care in order to improve patient outcomes. It includes holistic, preventative, and maintenance care. Both concepts are integrated throughout the curriculum, but the largest portion of psychosocial and health promotion content is received during the first and second semesters (NURS 116: Foundations of Nursing and NURS 128: Mental Health Nursing). Students should reach the highest level of understanding during the last semester. From 2023 to 2024, there is <1% difference in students

meeting or exceeding the benchmark for the psychosocial category (57.8% in 2023 and 58.5% in 2024). Disaggregated data reveals the bridge students who have more work experience and previous foundational knowledge tend to do slightly better.

Health promotion increased from 51.8% of students meeting or exceeding in 2023 to 75.4% in 2024. In practice, 100% of students in 2024 met or exceeded the expected achievement level. 2023 data is not present, clinical data collection began in 2024.

Analysis

Historic scores in psychosocial and health promotion largely prompted the major curriculum change in 2023, particularly NURS 116: Foundation of Nursing. The faculty believed that students were missing the basic framework that supported further development in these categories. The changes in the curriculum that addressed these issues included a complete revision of the first nursing course in the program. Unfortunately, both 2023 and 2024 cohorts had already progressed from that semester. As stated above, both concepts are integrated throughout the program. In the last two semesters of the program, there is a higher focus on more complex medical-surgical exemplars. Students must be able to adapt health promotion activities to fit individual patients and their various medical problems. Students have more opportunity to develop and gain understanding in health promotion because it is dependent on the various medical exemplars, whereas communication and psychosocial needs essentially remain the same for medical patients. When the curriculum changes were made, 2024 cohorts were unable to reach the same level of understanding in the psychosocial concepts that come with applying and adapting to diverse situations, because the focus is on medical patients. This would explain the <1% improvement in the category from 2023 to 2024.

There is significant improvement in health promotion. The basics of health promotion are taught in NURS 116, Foundations of Nursing, but students are repeatedly exposed in every course. An assumption can be made that students had enough opportunities in the remaining Medical-

Surgical courses to gain a better understanding. This would account for the increase from 2023 to 2024.

Clinical performance for this outcome is not at 100% yet it is worth noting that a larger portion of students scored in the level three category (16/53), which supports the assumption that this program outcome is an area of opportunity. There is a slight improvement from NURS 238, Medical Surgical Nursing III to NURS 239: Preceptor which shows a progression of student ability in a relatively short amount of time. NURS 238 is taught as an A session in the last semester and NURS 239 is a B session course.

Use of Results for Improvement

These results are similar to historical, trending data that faculty identified and elected to focus on during the majority of the curriculum changes specifically in the first and second semester. The intended results were to provide a stronger knowledge base that supported development in these areas.

What is the proposed timeline for the changes outlined above?

The first cohort to experience the fully revised curriculum began in Fall 2023 and will graduate in May of 2025.

Program Outcome #3

Evaluate critical thinking and clinical decision-making to provide safe, patient-centered care.

HESI Exit Exam Category: Psychosocial Integrity					
Cohort	I	II	III	IV	Total
PBB 23 EX	8	0	2	3	13
	61.5%	0.0%	15.4%	23.1%	
PBD 23 EX	8	0	9	4	21
	38.1%	0.0%	42.9%	19.0%	
SKB 23 EX	6	2	7	9	24
	25.0%	8.3%	29.2%	37.5%	
PBM 23 EX	8	3	6	8	25
	32.0%	12.0%	24.0%	32.0%	

HESI Exit Exam Category: Psychosocial Integrity					
Cohort	I	II	III	IV	Total
PBB 24 EX	2	3	1	8	14
	14.3%	21.4%	7.1%	57.1%	
PBD 24 EX	6	3	7	4	20
	30.0%	15.0%	35.0%	20.0%	
SKB 24 EX	7	1	3	8	19
	36.8%	5.3%	15.8%	42.1%	

HESI Exit Exam Category: Pharmacological and Parenteral Therapies					
Cohort	I	II	III	IV	Total
PBB 23 EX	2	1	5	5	13
	15.4%	7.7%	38.5%	38.5%	
PBD 23 EX	4	4	5	8	21
	19.0%	19.0%	23.8%	38.1%	
SKB 23 EX	8	2	5	9	24
	33.3%	8.3%	20.8%	37.5%	
PBM 23 EX	12	2	3	8	25
	48.0%	8.0%	12.0%	32.0%	

HESI Exit Exam Category: Pharmacological and Parenteral Therapies					
Cohort	I	II	III	IV	Total
PBB 24 EX	1	0	5	8	14
	7.1%	0.0%	35.7%	57.1%	
PBD 24 EX	4	3	3	10	20
	20.0%	15.0%	15.0%	50.0%	
SKB 24 EX	2	0	8	9	19
	10.5%	0.0%	42.1%	47.4%	

HESI Exit Exam Category: Physiological Adaptation					
Cohort	I	II	III	IV	Total
PBB 23 EX	3	3	3	4	13
	23.1%	23.1%	23.1%	30.8%	
PBD 23 EX	10	0	6	5	21
	47.6%	0.0%	28.6%	23.8%	
SKB 23 EX	10	1	7	6	24
	41.7%	4.2%	29.2%	25.0%	
PBM 23 EX	12	3	5	5	25
	48.0%	12.0%	20.0%	20.0%	

HESI Exit Exam Category: Physiological Adaptation					
Cohort	I	II	III	IV	Total
PBB 24 EX	0	0	9	5	14
	0.0%	0.0%	64.3%	35.7%	
PBD 24 EX	4	1	3	12	20
	20.0%	5.0%	15.0%	60.0%	
SKB 24 EX	0	1	4	14	19
	0.0%	5.3%	21.1%	73.7%	

HESI Exit Exam Category: Reduction of Risk Potential					
Cohort	I	II	III	IV	Total
PBB 23 EX	5	1	3	4	13
	38.5%	7.7%	23.1%	30.8%	
PBD 23 EX	10	2	5	4	21
	47.6%	9.5%	23.8%	19.0%	
SKB 23 EX	10	3	3	8	24
	41.7%	12.5%	12.5%	33.3%	
PBM 23 EX	15	2	4	4	25
	60.0%	8.0%	16.0%	16.0%	

HESI Exit Exam Category: Reduction of Risk Potential					
Cohort	I	II	III	IV	Total
PBB 24 EX	0	1	4	9	14
	0.0%	7.1%	28.6%	64.3%	
PBD 24 EX	3	1	5	11	20
	15.0%	5.0%	25.0%	55.0%	
SKB 24 EX	2	0	7	10	19
	10.5%	0.0%	36.8%	52.6%	

HESI Exit Exam Category: Safety and Infection Control					
Cohort	I	II	III	IV	Total
PBB 23 EX	3	0	4	6	13
	23.1%	0.0%	30.8%	46.2%	
PBD 23 EX	4	3	2	12	21
	19.0%	14.3%	9.5%	57.1%	
SKB 23 EX	10	1	7	6	24
	41.7%	4.2%	29.2%	25.0%	
PBM 23 EX	9	2	7	7	25
	36.0%	8.0%	28.0%	28.0%	

HESI Exit Exam Category: Safety and Infection Control					
Cohort	I	II	III	IV	Total
PBB 24 EX	2	0	2	10	14
	14.3%	0.0%	14.3%	71.4%	
PBD 24 EX	3	1	7	9	20
	15.0%	5.0%	35.0%	45.0%	
SKB 24 EX	2	3	8	6	19
	10.5%	15.8%	42.1%	31.6%	

HESI Exit Exam Category: Basic Care and Comfort					
Cohort	I	II	III	IV	Total
PBB 23 EX	2	4	2	5	13
	15.4%	30.8%	15.4%	38.5%	
PBD 23 EX	6	3	4	8	21
	28.6%	14.3%	19.0%	38.1%	
SKB 23 EX	5	0	3	16	24
	20.8%	0.0%	12.5%	66.7%	
PBM 23 EX	13	0	6	6	25
	52.0%	0.0%	24.0%	24.0%	

HESI Exit Exam Category: Basic Care and Comfort					
Cohort	I	II	III	IV	Total
PBB 24 EX	0	1	2	11	14
	0.0%	7.1%	14.3%	78.6%	
PBD 24 EX	3	2	1	14	20
	15.0%	10.0%	5.0%	70.0%	
SKB 24 EX	3	0	8	8	19
	15.8%	0.0%	42.1%	42.1%	

Clinical Tracking NURS-238					
Cohort	I	II	III	IV	Total
Sikeston	0	0	0	20	20
	0%	0%	0%	100%	
PBB Dec Grad	0	0	4	10	14
	0%	0%	29%	71%	
PBD May Grad	0	0	4	16	20
	0%	0%	20%	80%	

Clinical Tracking NURS-239					
Cohort	I	II	III	IV	Total
Sikeston	0	0	2	17	19
	0%	0%	11%	89%	
PBB Dec Grad	0	0	2	12	14
	0%	0%	14%	86%	
PBD May Grad	0	0	1	19	20
	0%	0%	5%	95%	

Assessment Results

Program Outcome #3 is the most comprehensive outcome and represents the largest portion of focus within the nursing field. Aside from psychosocial integrity (discussed under PO#1), every category improved by more than 20%. Psychosocial integrity had the lowest scores for 2024. Safety and infection control was the only other concept that did not have at least 80% of the students attaining the benchmark in 2024. However, when comparing the scores in safety and infection control, there was an improvement from 2023 to 2024. In 2023 61.4% of students met or exceeded level III compared to 79.2% in 2024.

Clinical performance also indicates that student performance is meeting or exceeding expectations.

Analysis

Positive changes are noted in nearly all areas, aside from psychosocial. Initial conclusions about the changes in the program are they are effective thus far.

Use of Results for Improvement

Students in the 2024 cohorts started in 2022 and were able to experience some of the curriculum changes that took place in 2023 but were unable to experience the newly revised foundations course that set the foundations for safety and infection control and psychosocial integrity. Some changes were able to be implemented immediately like the alignment of specific clinical experiences and didactic content. Medical-surgical concepts were revised to facilitate progression into harder and more complex material. Faculty integrated critical thinking examples into content instead of having a separate course for critical thinking.

Faculty to student ratios in the lab changed from 1:15 to 1:10 to allow for more meaningful feedback and direction. Cognitive, behavioral, and skill performance is represented by clinical evaluations and exam performance contributes to a multi-faceted assessment of program strengths. Faculty affirm that the way the program is now being assessed and evaluated correlates better with post-graduate performance.

What is the proposed timeline for the changes outlined above?

The plan is to continue to evaluate the data. Initial impressions are positive, yet the first cohort to experience the program revision from beginning to end will be the generic program that graduates in May of 2025.

Program Outcome #4

Apply evidence-based practice while recognizing the role of quality improvement in the healthcare system.

HESI Exit Exam Category: Management of Care					
Cohort	I	II	III	IV	Total
PBB 23 EX	3	2	4	4	13
	23.1%	15.4%	30.8%	30.8%	
PBD 23 EX	6	4	4	7	21
	28.6%	19.0%	19.0%	33.3%	
SKB 23 EX	11	1	2	10	24
	45.8%	4.2%	8.3%	41.7%	
PBM 23 EX	5	5	9	5	24
	20.8%	20.8%	37.5%	20.8%	

HESI Exit Exam Category: Management of Care					
Cohort	I	II	III	IV	Total
PBB 24 EX	0	2	1	11	14
	0.0%	14.3%	7.1%	78.6%	
PBD 24 EX	0	0	4	16	20
	0.0%	0.0%	20.0%	80.0%	
SKB 24 EX	0	0	2	17	19
	0.0%	0.0%	10.5%	89.5%	

Clinical Tracking NURS-238					
Cohort	I	II	III	IV	Total
Sikeston	0	0	0	20	20
	0%	0%	0%	100%	
PBB Dec Grad	0	0	8	6	14
	0%	0%	57%	43%	
PBD May Grad	0	0	5	15	20
	0%	0%	25%	75%	

Clinical Tracking NURS-239					
Cohort	I	II	III	IV	Total
Sikeston	0	0	1	18	19
	0%	0%	5%	95%	
PBB Dec Grad	0	0	2	12	14
	0%	0%	14%	86%	
PBD May Grad	0	0	0	20	20
	0%	0%	0%	100%	

Assessment Results

Student performance increased in management of care from 2023 to 2024. Clinical tracking also indicates that management of care is meeting expectations.

Analysis

Program Outcome #4 mostly consists of quality improvement, evidence-based practice, and prioritization that fall under management of care. As a totaled category, management of care has the same scores reflected in PO#1. Again, these scores can be further disaggregated into multiple subsections for a more detailed analysis that can provide more direction for continuous improvement.

Conversely, the clinical evaluation tools contain sections that are specific to one program outcome. Students reach the highest level of understanding during the final eight weeks of the last semester where they are functioning independently under the supervision of a preceptor. The opportunity to practice independently strengthens the ability to comprehensively care for patients, then subsequently facilitates to the “management of care” improvement within this program outcome. This progression to a more independent practice takes place between NURS 238: Medical-Surgical Nursing III and NURS 239: Preceptor.

Use of Results for Improvement

Continued evaluation.

What is the proposed timeline for the changes outlined above?

The plan is to continue to evaluate the data. Initial impressions are positive, yet the first cohort to experience the program revision from beginning to end will be the generic program that graduates in May of 2025.

Program Outcome #5

Select appropriate information and technology in the management of patient care.

Clinical Tracking NURS-238					
Cohort	I	II	III	IV	Total

Sikeston	0	0	0	20	20
	0%	0%	0%	100%	
PBB Dec Grad	0	0	6	8	14
	0%	0%	43%	57%	
PBD May Grad	0	0	3	17	20
	0%	0%	15%	85%	

Clinical Tracking NURS-239					
Cohort	I	II	III	IV	Total
Sikeston	0	0	1	17	18
	0%	0%	6%	94%	
PBB Dec Grad	0	0	3	11	14
	0%	0%	21%	79%	
PBD May Grad	0	0	1	19	20
	0%	0%	5%	95%	

Assessment Results

Students improved in the use of technology at clinical sites as they progressed through the final semester.

Analysis

Student readiness for the use of technological equipment in the workforce is systematically assessed by regulatory bodies. Orientation to equipment and technology and the opportunity to practice with relevant, up-to-date resources are specific topics on annual reports and site visits. As a program outcome, it is measured during clinicals.

Use of Results for Improvement

The results of this program outcome improved over the course of the last semester as evidenced by the advancement of more students into the level IV section in NURS 239: Preceptor. Periodically this data trends downward, which prompts a more in-depth review of equipment and technology. Throughout the last few years, the improvement process for this program outcome has contributed to the purchase of electronic health records in the simulation laboratory and computerized medication dispenser. Both pieces of equipment are considered standards of care and the experience gained by their use facilitates safe, practice-ready graduates. According to

nursing program accreditors, each program outcome should utilize more than one assessment method for evaluation. Each method must be different to provide a distinct/diverse perspective/viewpoint. Occasionally, scores decrease slightly from the first eight weeks to the last eight weeks. During preceptorship, students may be assigned to new facilities with equipment and technology brands that are unfamiliar. In this case, preceptors must orient and prompt students through the use of this technology which may attribute to slightly lower score at the end of the program.

There is one set of clinical evaluation scores missing for a Sikeston Bridge student for NURS 238. The same student's scores were present and collected in NURS 239. The missing scores for NURS 238 are not anticipated to have any impact on the current rubrics, the student was an above average performer in the clinical setting.

What is the proposed timeline for the changes outlined above?

Data collection will continue, and one additional data point will be elected to provide the "varied" assessment method required by accreditors. A technology section will be added to employer surveys and responses will be totaled. Data collection will begin after each graduate in the cohort has successfully passed the NCLEX and worked for at least three to six months as a graduate nurse. For the purposes of future SLO reports, this data is not able to be collected in a timely manner.

Additional Summary Notes

Anomalies in the results that were noticed:

In order to organize graduate data, cohorts are grouped and arranged by NCLEX testing year, not graduation.

This program report contains the years in which a major curriculum change was implemented, but not fully integrated. The cohorts in 2024 were the first to experience the minor changes in the curriculum, but data from cohorts who started and completed the fully revised curriculum may better represent student achievement, particularly improvement in student achievement as a result of continuous improvement. Clinical evaluation data was not available until 2024. The decision to use clinical evaluation data was made after program evaluation methods were assessed for relevancy. The program had previously been utilizing a report from the licensing exam (post-graduation) that was generated annually. The report was not able to provide feedback timely, was not accurately interpreted, and could not represent specific student populations by cohort, program option, or even graduation date. Additionally, it was considered too similar to the use of HESI data, both of which were didactic or cognitive in nature. The price of the report increased from a flat rate to a price per student plus flat rate, and abruptly became unavailable to the program. As a result, there is a short time frame (2023) that end-of-program student learning outcomes do not have two varied methods of assessment. Program Outcome #5 had never been systematically assessed.

Were there any patterns in the data observed?

Between 2022 and 2023, the program revised the systematic evaluation plan and selected relevant, appropriate, and meaningful ELAs that truly reflected performance and assessed student performance. This led to the revision of the curriculum and an update in instruction

within the nursing program. The latest data reflects an upward trend in each category, and in 2024 the program-adopted levels of achievement were met in every program outcome.

The correlation between meeting the ELAs established for each program outcome (for the first time) in 2024 and the 2024 annual first-time NCLEX pass rate of 100% (for the first time) reinforced the relevancy of updated program assessment methodology that occurred in 2022-2023.

Addendum

Program Name:

(1) Associate Degree Nursing Program

On program outcomes assessments in the past, faculty expressed concern regarding the use of HESI data because students often rushed through when grades were not impacted or different versions of the same exam were not required. Data was often skewed, and it made outcome assessment difficult. The program has updated the method of data collection and incentivized students to take exams seriously, which has allowed relevant data to be collected.

(2) First time NCLEX pass rates are strictly monitored by the regulatory bodies and programs are expected to reach 80% or better to maintain program approval. Program performance is closely related to the ability of students to pass the NCLEX, and therefore NCLEX categories are integrated into program outcomes. One of the strongest predictors of individual student performance on the NCLEX is the student performance on the HESI achievement exams. HESI performance reports provide achievement data in NCLEX categories, and then subsequently provide insight into program outcomes. Programs must maintain a rigorous and robust curriculum that progresses students from knowledge and comprehension to application and analysis level of the nursing continuum. While student performance is the most significant program output, the program must also report retention rates. According to regulatory bodies, the program may set a goal for retention rate as long as it is achievable and promotes continuous improvement to attain the set goal. The balance between first-

time NCLEX pass rates and retention rates has been inversely correlated. The program set a completion rate at 60% or greater for students 100% of the time (on-time). In 2023, the NCLEX first-time pass rate was 85.5%, and the retention rate for the same students was 75%. In 2024, the NCLEX first-time pass rate was 100% and the retention rate for the same students was 70%. Student performance increased from 2023 to 2024 as evidenced by both program outcome data and first-time NCLEX pass rates. Although the ELA for the program retention rate has been met, there has been a decrease from 2023 to 2024, which implies that the changes in the curriculum has increased the rigor.



THREE RIVERS COLLEGE

AAS Paramedic

Program Level SLO Report

Tami Cunningham – Program Manager

2023-2024

Program Purpose Statement

AAS-Paramedic Purpose: Career and Technical Education. To prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.

Paramedic Program Learning Outcomes

1. Provide a safe, supportive and effective environment for each pre-hospital encounter.
2. Manage emergency situations using sound judgment and protocol/procedures to respond in an efficient manner.
3. Demonstrate knowledge of the legal aspects of EMS (ex. HIPAA), and local policy limits, to all patient encounters while recognizing and accepting personal responsibility for one's actions, or lack of action, in the practice of emergency medicine.
4. Communicate in a professional manner with all members of the health care team.
5. Utilize knowledge of normal/abnormal anatomy and physiology and pharmacology in pre-hospital emergency care.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Paramedic: Program Outcomes Mapping

Program Outcome 1:		
Provide a safe, supportive and effective environment for each pre-hospital encounter.		
Course	Course Learning Outcome (CLO)	Artifact Used
EMT 105: EMT	Demonstrate safe patient handling techniques. (CLO 3)	Patient Assessment Scenario
PARA 210: Paramedic I	Manage the different types of scenes, such as crime, Haz-Mat, and rescue. (CLO 4)	Patient Assessment Scenario
PARA 215: Paramedic Internship I	Initiate intravenous administration with/without fluid and/or medication administration by all routes. (CLO 2)	Internship Assessment Sheet
	Manage pre-hospital patients with medical emergencies. (CLO 4)	Can NOT be assessed in this course.
PARA 220 Paramedic II	Provide pre-hospital care to the medical, trauma, and special consideration patient. (CLO 4)	Patient assessment scenario
PARA 225: Paramedic Internship II	Demonstrate medication administration using all routes. (CLO 2)	Internship Assessment Sheet
	Provide pre-hospital care to the medical, trauma, and special consideration patient. (CLO 3)	Internship Assessment Sheet

Program Outcome 2:

Manage emergency situations using sound judgment and protocol/procedures to respond in an efficient manner.

Course	Course Learning Outcome (CLO)	Artifact Used
EMT 105: EMT	Choose appropriate emergency medical care based on assessment findings of the patient's condition. (CLO 2)	Patient Assessment
PARA 210: Paramedic I	Apply protocols/procedures to emergency situations for patients of all ages. (CLO 5)	Patient Scenario
PARA 215: Paramedic Internship I	Place and administer care of advanced airway devices. (CLO 3)	Surgery internship sheet
PARA 220: Paramedic II	Apply the protocols/procedures of ACLS, PHTLS, and PALS to pre-hospital patients. (CLO 1)	ACLS, PHTLS, & PALS Exam
PARA 230: Paramedic III	Implement a treatment plan for emergency situations. (CLO 1)	Scenario (Stroke)
	Show competency for National Registry Cognitive and psychomotor examination. (CLO 2)	Test Prep 1 Exam
PARA 235: Paramedic Internship III	Demonstrate the ability to perform a comprehensive assessment on medical, trauma, or special consideration patients. (CLO 1)	Capstone Competencies Sheet
	Safely perform advanced life support skills. (CLO 2)	Capstone Competencies Sheet

Program Outcome 3:

Demonstrate knowledge of the legal aspects of EMS (ex. HIPAA), and local policy limits, to all patient encounters while recognizing and accepting personal responsibility for one's actions, or lack of action, in the practice of emergency medicine.

Course	Course Learning Outcome	Artifact Used
EMT 105: EMT	Safely and effectively perform the roles and responsibilities of the EMT job description. (CLO 4)	Patient Assessment
PARA 210: Paramedic I	List the roles and responsibilities of the paramedic including personal wellness, injury prevention activities, and legal and ethical issues that impact decisions made in the pre-hospital setting. (CLO 1)	Final Exam
PARA 225: Paramedic Internship II	Demonstrate the roles and responsibilities of the paramedic including personal wellness, injury prevention activities, and legal and ethical issues that impact decisions made in the pre-hospital setting. (CLO 1)	Preceptor Evaluation

Program Outcome 4:

Communicate in a professional, considerate, and cooperative manner with all members of the healthcare team.

Course	Course Learning Outcome (CLO)	Artifact Used
PARA 210: Paramedic I	Apply the principles of therapeutic communication to effectively communicate with patients of all ages. (CLO 3)	Patient Scenario

PARA 215: Paramedic Internship I	Demonstrate professional conduct and communication skills with patient, families, healthcare team, and the community as a paramedic. (CLO 1)	Preceptor Evaluation
PARA 220: Paramedic II	Demonstrate professional communication with the healthcare team including patient report and documentation. (CLO 2)	Affective Evaluation Scenario
PARA 225: Paramedic Internship II	Demonstrate professional communication with the healthcare team including patient report and documentation. (CLO 4)	Preceptor Evaluation
PARA 230: Paramedic III	Demonstrate professional communication with the healthcare team including patient report and documentation. (CLO 3)	Affective Evaluation Scenario
PARA 235: Paramedic Internship III	Demonstrate the ability to serve as a team leader in a variety of pre-hospital emergency situations. (CLO 3)	Capstone Evaluation
	Demonstrate professional communication with the healthcare team including patient report and documentation. (CLO 4)	Capstone Evaluation

Program Outcome 5:

Utilize knowledge of normal/abnormal anatomy and physiology, and pharmacology in pre-hospital emergency care.

Course	Course Learning Outcome (CLO)	Artifact Used
EMT 105: EMT	Assess the nature and seriousness of the patient's condition or extent of injuries to provide emergency medical care. (CLO 1)	Medical Exam
PARA 210: Paramedic I	Use the principles of anatomy and physiology and pharmacology for pre-hospital patient encounters. (CLO 6)	Pharmacology Exam
PARA 220: Paramedic II	Use the principles of anatomy and physiology and pharmacology for pre-hospital patient encounters. (CLO 3)	Patient Assessment Scenario

Introduction

All EMS classes are a hybrid modality with face-to-face one day a week to practice what they are learning. EMT-105 is the first level of EMS licensure. This is a basic course to provide training for the provider to perform basic patient care to the sick or injured. The EMT-105 course had two sections in the fall 2023 semester and one section in spring 2024 with a total of twenty-three students. All PARA prefix courses are within the paramedic program and the higher the number progression corresponds to higher the expectations for student performance, which is aligned to the assessment in PARA 210, 215, (first semester) 220, and 225 (second semester) 203 and 235 (third semester). For PARA 210, 215, 220, and 225 the cohort started with ten students (PARA210 and 215) and in the spring semester one student failed the course leaving nine students (PARA 220 and 225). During this reporting period there was one full-time faculty and three lab assistants to meet the students' needs during their one day a week class attendance. The EMS program does not have any fully online classes or dual credit students. Assessing the student for competency, the faculty look at each student encounter for an entry level practitioner performance. The student is assessed using the rubric to identify the level of student learning using cognitive, psychomotor, and affect learning domains scoring the student into one of four categories. These categories are; level I, novice or little to no understanding; level II, some understanding but not to an entry level practitioner; level III competent entry level provider; and level IV, scored above an entry level provider and is mastering the tasks.

Program Outcome #1

Provide a safe, supportive and effective environment for each pre-hospital encounter.

Provide a safe, supportive and effective environment.	Level I	Level II	Level III	Level IV
EMS Operations Psychomotor	Fails to properly identify the EMS operations and usage.	Fails to manage the EMS operations and usage.	Manages operations with minor errors and none being life threatening	Manages the ECG operations correctly and consistently
Patient Assessment Psychomotor	Patient assessment not provided or multiple errors.	The patient assessment provided with errors and slower than expectation.	Provides an appropriate and mostly accurate assessment of the patient including sick/not yet sick, ABC's, vital signs, history, and physical exam.	Provides a quick, thorough and accurate assessment of the patient including sick/not yet sick, ABC's, vital signs, history, and physical exam.
Preparatory Affective	Does not apply the standard of responsibility.	Inadequately applies standard of responsibility	Applies standards of responsibility with minor errors.	Correctly and consistently applies the standard of responsibility.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
EMT 105	EMT	3	23	Section 3 Students 23	None	None	FT:1 PT: 3	Yes
PARA 210	Paramedic I	1	10	Sections 1 Students 10	None	None	FT: 1 PT: 3	Yes
PARA 215	Paramedic Internship I	1	9	Sections 1 Students 9	None	None	FT: 1 PT: 3	Yes

PARA 220	Paramedic II	1	9	Sections 1 Students 9	None	None	FT: 1 PT: 3	Yes
PARA 225	Paramedic Internship II	1	9	Sections 1 Students 9	None	None	FT: 1 PT: 3	Yes

	Topic Assessed	I	II	III	IV	Total # of Students
EMT 105	EMS Operations Psychomotor	0	0	16	7	23
	Patient Assessment Psychomotor	0	1	14	9	23
	Preparatory Affective	0	0	5	19	23
		0%	2%	48%	48%	
PARA 210 Paramedic I	EMS Operations Psychomotor	0	0	2	8	10
	Patient Assessment Psychomotor	0	0	8	2	10
	Preparatory Affective	0	0	8	2	10
		0%	0%	60%	40%	
PARA 215 Paramedic Internship I	EMS Operations Psychomotor	0	0	2	8	10
	Patient Assessment Psychomotor	0	0	8	2	10
	Preparatory Affective	0	0	8	2	10
		0%	0%	60%	40%	
PARA 220 Paramedic II	EMS Operations Psychomotor	0	0	2	7	9
	Patient Assessment Psychomotor	0	0	6	3	9
	Preparatory Affective	0	0	6	3	9

		0%	0%	52%	48%	
PARA 225 Paramedic Internship II	EMS Operations Psychomotor	0	0	3	6	9
	Patient Assessment Psychomotor	0	0	3	6	9
	Preparatory Affective	0	0	3	6	9
		0%	0%	33.5%	66.5%	

Assessment Result: Program Outcome #1:

Results for program outcome one, to provide a safe, supportive and effective environment for each pre-hospital encounter in EMT 105 the course level number III is used during a patient assessment scenario. The student demonstrates safe patient handling techniques while performing a patient care scenario. In the scenario used, the faculty assess areas of EMS operations, patient assessment and the preparedness of the student. In the twenty-three students assessed 48% of the students were at level III and 48% were level IV leaving 2% below competent. In the paramedic courses PARA 210, 220 patient assessment scenario is used and in PARA 215 and 225 internship evaluations are used to determine the Program Learning Outcome (PLO). In the PLO assessment, the Course Level Outcome (CLO) looks at scene management, medication/routes, prehospital care to all types of patients. PARA 210 and 220 are classroom classes; patient assessment scenario is used for assessment in both courses looking at the same as the EMT 105 just on a more advanced level. PARA 215 and 225 are both internship courses that are assessed by their clinical preceptor. The results are, in PARA 215 the preceptors found the students to be 60% competent level III and 40% mastery level IV and in PARA 225 the preceptors show a 33% competent level III and 66% mastery level.

Analysis:

Data shows that the students are meeting the benchmarks set forth in the PLO and CLO. In EMT 105 (EMT), PARA 210, 220, and 220 (Paramedic Classes) PARA 215, 225, and 235 (Paramedic Internship) in these courses the students are assessed while performing a scenario and or during internship, to ensure they are meeting the CLO that is feeding into the PLO. While the student is in the scenario the faculty members are looking for the student to demonstrate safe patient care. To show that the student understands and can demonstrate the safety of the patient, the scene, and the crew we look at specific areas, EMS operations, patient assessment, and preparatory. While assessing the student's performance whether it is in a scenario or during internship, we are looking to assure the student is delivering safe effective treatment, being prepared for the situation and the changes that are happening during the scenario while maintaining a professional affective behavior. Each course has met 100% competency level III or mastery level IV. The faculty noticed that these rubrics focus is on preparation in EMS operations. In the first semester (PARA 210, and 215), the student does have a good basic knowledge of preparation in EMS operations. However, we are looking for an advanced level. The topics of EMS operations are discussed in PARA 220 and PARA 230. The progression of the program is universal with paramedic books across the nation and was never a good idea. I found a book publisher in the spring of 2024 that moved the topics around in the lectures to place the student into EMS operations early in the first semester. The program adopted that book version for the fall of 2024. The last issue that arose is in PARA 215 for PLO #1 (Provide a safe, supportive and effective environment for each pre-hospital encounter) is the first semester internship (hospital rotations), the pre-hospital setting that is described in the PLO # 1 (Manage pre-hospital patients with medical

emergencies. (CLO 4)), currently the PLO and CLO is assessed in PARA 215 internship (hospital internship). The hospital internship does not have a prehospital component, as a result, this is unable to be assessed.

Use of Results for Improvement:

The students are meeting the expected competencies set forth in the rubric, but the validity of the rubrics is in question. After examining the current rubric, changes need to be addressed. The changes in the rubric will be to the description identifying the students' level of learning. The description in the rubric for each level of learning is very subjective and needs to be more factual. The faculty noticed that these rubrics were looking into preparation in EMS operations. The other change will be moving CLO #4 to an appropriate PLO where it can be assessed appropriately.

What is the proposed timeline for the changes outlined above?

The proposed timeline for the changes is spring 2025.

- New Paramedic book implemented fall 2024. **COMPLETED**
- Curriculum change to Manage pre-hospital patients with medical emergencies. (CLO 4)

Program Outcome #2

Manage emergency situations using sound judgment and protocol/procedures to respond in an efficient manner.

	Level I	Level II	Level III	Level IV
Airway Management Psychomotor	Inability to manage the airway.	Inability to manage the airway consistently or managing the airway with errors being life threatening.	Manages the airways with minor errors and none of which are life-threatening.	Manages the airway appropriately and consistently.
ECG Recognition Psychomotor	Inability to properly identify the ECG rhythm.	Inability to manage the ECG rhythm consistently.	Manages the ECG with minor errors in which none is life threatening.	Manages the ECG correctly and consistently.
Judgement Psychomotor	Cannot assess the run or prioritize, identify problems, treatment, or plan of care.	Assess the run and identifies problems and potential treatments with consistent guidance.	Accurately assess the run and correctly identifies the need, plan of treatment, and prioritizes problems with occasional guidance.	Accurately assesses the run and correctly identifies the need, plan of treatment, and prioritizes the problems correctly with no guidance.
Medical Psychomotor	Inadequately determine patient's condition or priority.	Inconsistently able to determine the patient's condition or priority.	Consistently able to determine the patient's condition or priority minor errors.	Correctly and consistently identifies patient's condition or priority.
Pediatric Assessment Psychomotor	Inadequately determine patient's condition or priority.	Inconsistently able to determine the patient's condition or priority.	Consistently able to determine the patient's condition or priority minor errors.	Correctly and consistently identifies patient's condition or priority.
Skills Psychomotor	Does not perform entry-level Paramedic skills at the expectation level.	Meets some of the expectations for the skill level of an entry-level Paramedic.	Consistently performs at the entry-level for Paramedic skills.	Exceeds at entry-level Paramedic skills (IV, ETT, LifePak, 12-Lead Interpretation, Etc).
Special Patients Cognitive	Misidentifies patient's condition or priority causing a life-threatening condition.	Misidentifies patient's condition or priority without causing a life-threatening condition.	Identifies patient's condition or priority with minor errors	Correctly and consistently identifies patient's condition or priority.

Trauma Psychomotor	Misidentifies patient's condition or priority causing a life-threatening condition.	Misidentifies patient's condition or priority without causing a life-threatening condition.	Identifies patient's condition or priority with minor errors in which none is life threatening.	Correctly and consistently identifies patient's condition or priority.
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Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved ?
EMT 105	EMT	3	23	Sections 3 Students 23	None	None	FT: 1 PT: 3	Yes
Para 210	Paramedic I	1	10	Sections 1 Students 10	None	None	FT: 1 PT: 3	Yes
PARA 215	EMS Internship I	1	10	Sections 1 Students 10	None	None	FT: 1 PT: 3	Yes
Para 220	Paramedic II	1	9	Sections 1 Students 9	None	None	FT: 1 PT: 3	Yes
Para 230	Paramedic III	1	8	Sections 1 Students 9	None	None	FT: 1 PT: 3	Yes
PARA 235	EMS Internship II	1	8	Sections 1 Students 8	None	None	FT: 1 PT: 3	Yes

	Topic Assessed	I	II	III	IV	Total # of Students
EMT 105 EMT	Airway management	0	0	14	9	23
	ECG Recognition	N/A	N/A	N/A	N/A	N/A
	Judgement	0	4	12	7	23
	Special Patient Cognitive Skills/Psychomotor	0	2	9	12	23
		0	0	14	9	23
		0%	6%	53%	40%	
PARA 210	Airway management	0	0	8	2	10
	ECG Recognition	0	4	5	1	10

Paramedic I	Judgement	0	0	7	3	10
	Special Patient Cognitive Skills/Psychomotor	0	0	7	3	10
		0	0	5	5	10
		0%	8%	64%	28%	
PARA 215 Paramedic Internship I	Airway management	0	0	10	0	10
	ECG Recognition	0	4	5	1	10
	Judgement	0	0	10	0	10
	Special Patient Cognitive Skills/Psychomotor	0	0	10	0	10
		0	0	10	0	10
		0%	8%	90%	2%	
PARA 220 Paramedic II	Airway management	0	0	7	2	9
	ECG Recognition	0	0	5	4	9
	Judgement	0	0	6	3	9
	Special Patient Cognitive Skills/Psychomotor	0	0	4	5	9
		0	0	7	2	9
		0%	0%	64%	36%	
PARA 230 Paramedic III	Airway management	0	0	4	4	8
	ECG Recognition	0	0	4	4	8
	Judgement	0	0	4	4	8
	Special Patient Cognitive Skills/Psychomotor	0	0	3	5	8
		0	0	4	4	8
		0%	0%	43%	47%	
PARA 235 Paramedic Internship III	Airway management	0	0	8	0	8
	ECG Recognition	0	0	6	2	8
	Judgement	0	0	6	2	8
	Special Patient Cognitive Skills/Psychomotor	0	0	5	3	8
		0	0	4	4	8
		0%	0%	73%	27%	

Assessment Results:

The results of PLO #2 Manage emergency situations using sound judgment and protocol/procedures to respond in an efficient manner is assessed in EMT 105, PARA 210, 215, 220, 230, and 235. To assess this PLO each course looks at five areas, the areas are airway management, ECG recognition, judgement, special patient cognitive and pshycomotor skills. In EMT 105, 6% were at level II, 53% at level III and 40% of the students were at level IV. In PARA 210, 8% of the students were at level II, 64% at level III and 28%

at level IV. In PARA 215, 8% at level II, 90% at level III, and 2% at level IV; PARA 220, 64% of the students were at level III and 36% were at level IV; PARA 230, 43% of the students were at level III and 47% were at level IV; and PARA 235, 70% at level III and 27% of the students were at level IV.

Analysis:

Most of the students are meeting the expected competencies set forth in the rubric as best as it can be assessed. The EMS courses start out basic and advances as the student progresses in the program. EMT is the basic course that is completed in one semester, in saying that the student should be competent at the end of the course in each area and the results show competency in the students' performance of a patient assessment skills checkoff. Starting the Paramedic program the student is at various levels of learning based on their EMT training, the service of employment and their own learning abilities. PARA 210 (patient scenario) and 215 (surgery internship) are the first semester courses that should not show a sizable percentage above level III (competent). This is the first building block of the paramedic practitioner. As the paramedic student progresses in the program, we look for progression in their level of learning. Data supports the progression of the student's level of learning. These results are what the program is looking for to assure the public and our accreditors that we are providing entry level paramedics.

There were problematic areas in the assessment. Program Outcome #2 is worded in a manner that is not as clear as it could be and the faculty would like to look for progression in the students learning, so each class needs to be assessed.

Use of Results for Improvement

After looking deeply at the rubric there are changes that need made. Changes need to be made to the wording to PLO #2, the description of the assessment in the level of learning areas, and PARA 235 should be added to the list of courses being assessed. Program Outcome #2 has incorrect wording and is unable to be assessed in each course as described. I am going to propose that the wording be changed to “*Efficiently manage emergency situations using sound judgment and protocol/procedures to provide emergency patient care*”. The change in the rubric is the wording that describes the level of learning and the description in the rubric for each level of learning is very subjective and needs to be more factual. The last change is PARA 235 needs added to the courses assessed in PLO # 2.

What is the proposed timeline for the changes outlined above?

The proposed timeline to change the wording in the rubric is fall 2024 and the addition to assess PARA 235 is set for summer 2025.

Program Outcome #3

Demonstrate knowledge of the legal aspects of EMS (ex. HIPAA), and local policy limits, to all patient encounters while recognizing and accepting personal responsibility for one's actions, or lack of action, in the practice of emergency medicine.

Criteria	Level I	Level II	Level III	Level IV
Patient Care Cognitive	Does not apply the standard of care.	Inadequately applies the standard of care.	Applies the standard of care with minor errors.	Correctly and consistently applies the standard of care.
Run Management Affective	Does not manage the run and needs full direction.	Manages parts of the run with an EMT partner. Requires frequent cues and direction.	Appropriately manage the run with an EMT partner. Requires occasional cues and direction.	Able to multi-task, efficient, problem solve, and effectively delegates to EMT's. Requires minimal to no cues or direction/

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved ?
EMT 105	EMT			Sections Students	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 210	Paramedic I	1	9	Sections 1 Students 9	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 225	Paramedic Internship II	1	9	Sections 1 Students 9	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes

	Topic Assessed	I	II	III	IV	Total # of Students
EMT 105 EMT	Patient Care Cognitive	0	2	9	12	23
	Run Management	0	3	13	7	23
		0%	11%	48%	41%	
PARA 210 Paramedic I	Patient Care Cognitive	0	0	3	5	8
	Run Management	0	0	3	5	8
		0%	0%	38%	62%	
PARA 225 Paramedic Internship II	Patient Care Cognitive	0	0	2	6	8
	Run Management	0	0	2	6	8
		0%	0%	25%	75%	

Assessment Result:

EMT 105 data shows 11% of the students were at level III, 48% of the student were at level III (competent) and 41% of the student reached level IV (mastery). PARA 210, first semester of the paramedic program 38% of the students were in level III (competent) and 62% were in level IV (mastery. PARA 225 is the second semester internship course, and 25% students reached level III and 75% reached level IV (mastery).

Analysis:

All the students reached level III or IV in each course assessed. EMT 105 is assessed through a student patient assessment during a scenario, looking at the areas of patient care and run management as does PARA 210 and 225. EMT 105 uses course level outcome *#4 Safely and effectively perform the roles and responsibilities of the EMT job description.* PARA 210 students' area assessed for Program Outcome #3 by the CLO #1 during the final exam. In PARA 225 it is assessed by CLO #1, *Demonstrate the roles and responsibilities of the paramedic including personal wellness, injury prevention activities, and legal and ethical issues that impact decisions made in the pre-hospital setting.* For this

outcome, whether it is at the basic level EMT 105 or the more advanced level of practitioner such as PARA 221 or 225 the student should be competent (level III) at the very least.

Use of Results for Improvement

Look into any student that does not score at level III or above to see if that student was successful at the end of course and analyze the data to see exactly what area of the assessment or artifact dropped them below competency. We will look for areas of consistency within the students to improve that component.

What is the proposed timeline for the changes outlined above?

The proposed timeline for the changes is fall 2024.

Program Outcome #4

Communicate in a professional, considerate, and cooperative manner with all members of the healthcare team.

Criteria	Level I	Level II	Level III	Level IV
Attitude Affective	Does not provide care as part of the health care team.	Provides care to the patient with some collaboration as a team member.	Provides compassionate care to the patient while maintaining a collaborative relationship with the healthcare team.	Provides compassionate care to the patient while maintaining a highly collaborative relationship with the healthcare team
Communication Affective	Does not provide a detailed report (verbal or written).	Provides information about the patient's status with errors or missing information, illegible.	Provides an accurate detailed report (verbal and written).	Provides a concise, accurate and detailed report (verbal and written).
EMS Disaster Affective	Does not identify the standard of care.	Incorrectly identifies the standard of care	Identifies the standard of care but with minor errors.	Correctly and consistently identifies the standards of care.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PARA 210	Paramedic 1	1	10	Sections 1 Students 10	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 215	Paramedic Internship I	1	10	Sections 1 Students 10	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes

PARA 220	Paramedic II	1	9	Sections 1 Students 9	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 225	Paramedic Internship II	1	9	Sections 1 Students 9	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 230	Paramedic III	8	8	Sections 1 Students 8	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 235	Paramedic Internship III	1	8	Sections 1 Students 8	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes

	Topic Assessed	I	II	III	IV	Total # of Students
PARA 210 Paramedic I	Attitude Affective	0	0	3	7	10
	Communication Affective	0	0	3	7	10
	EMS Disaster Affective	0	0	8	2	10
		0%	0%	47%	53%	
PARA 215 Paramedic Internship I	Attitude Affective	0	0	10	0	10
	Communication Affective	0	0	10	0	10
	EMS Disaster Affective	N/A	N/A	N/A	N/A	Unable to assess in this course
		0%	0%	100%	0%	
PARA 220 Paramedic II	Attitude Affective	0	0	1	8	9
	Communication Affective	0	0	1	8	9
	EMS Disaster Affective	0	0	9	0	9
		0%	0%	41%	59%	
PARA 225 Paramedic Internship II	Attitude Affective	0	0	6	3	9
	Communication Affective	0	0	6	3	9
	EMS Disaster Affective	0	0	9	0	9
		0%	0%	78%	22%	

PARA 230 Paramedic III	Attitude Affective	0	0	2	6	8
	Communication Affective	0	0	5	3	8
	EMS Disaster Affective	0	0	5	3	8
		0%	0%	50%	50%	
PARA 235 Paramedic Internship III	Attitude Affective	0	0	6	2	8
	Communication Affective	0	0	5	3	8
	EMS Disaster Affective	0	0	8	0	8
		0%	0%	80%	20%	

Assessment Result

PARA 210, 215, 220, 225, 230, and 235 represent every course in the paramedic programs advanced level and look at the area of affective behavior; assessing the student's attitude, communication, and EMS disaster abilities while in scenario or during internship. All students scored in at least level III or IV. In PARA 210 (scenario), 47% scored in level III and 53% in level IV. In PARA 215 (preceptor evaluation), 100% of the students scored at level III. PARA 220 (patient assessment) 41% were at level III and 59% of the students were at level IV. PARA 225 (preceptor evaluation, internship) 78% were at level III and 22% at level IV. PARA 230 (scenario) the students were consistently at 50% level III and 50% level IV. PARA 235 (preceptor evaluation, capstone) the preceptors assessed the student at 80% level III and 20% level IV.

Analysis:

The student is assessed in the courses by their performance in scenario and their performance in actual patient care. PARA 210 uses CLO #3, *Apply the principles of therapeutic communication to effectively communicate with patients of all ages*. PARA 215

internship in the hospital uses CLO # 1, *Demonstrate professional conduct and communication skills with patients, families, healthcare team, and the community as a paramedic*. PARA 220, 225, 230 and 230 all assess the Program Outcome at the course level using the outcome, *Demonstrate professional communication with the healthcare team including patient report and documentation*. While in scenario, the faculty assess the student, in internship many different preceptors are evaluating their abilities, and during capstone the student is assigned to the same three preceptors. In knowing this, the faculty feel the data gathered in PARA 210, 220, 230, and 235 is an accurate assessment. While in PARA 215 and 225 the accuracy of the data may be skewed, due to multiple people's (preceptor) options.

Use of Results for Improvement:

Knowing the data may be skewed, the thought is to pull data from one preceptor per student in each course that is using multiple preceptors. Then reanalyze the data using this process for the 2024-25 SLO report.

What is the proposed timeline for the changes outlined above?

The proposed timeline for the changes is SLO 2024-25. In the fall of 2024 and spring of 2025 for each of the following courses: EMT 105, PARA 215, PARA 225 the faculty will find one common preceptor that is being used by the student to analyze the data for assessment results.

Program Outcome #5

Utilize knowledge of principles in asepsis, normal/abnormal anatomy and physiology, microbiology, and pharmacology.

Criteria	Level I	Level II	Level III	Level IV
Knowledge Cognitive	Demonstrates no knowledge of medical/trauma principles, pathophysiology, pharmacology, and use of medications.	Demonstrates some knowledge of medical/trauma principles, pathophysiology, pharmacology, and use of medications.	Demonstrates knowledge of medical/trauma principles, pathophysiology, pharmacology, and use of medications.	Demonstrates a high-level of medical/trauma principles, pathophysiology, pharmacology, and use of medications.
Medication Administration Cognitive	Unable to deliver medication using priority, safety, and the 8 patient rights of medication administration.	Inconsistently delivering medication using priority, safety, and the 8 patient rights of medication administration.	Correctly and consistently delivers medication using priority, safety, and the 8 patient rights of medication administration with minor errors that, none is life threatening.	Correctly and consistently delivers medication using priority, safety and the 8 patient rights of medication administration.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved ?
EMT 105	EMT	3	23	Sections 3 Students 23	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 210	Paramedic I	1	10	Sections 1 Students 10	Sections 0 Students 10	Sections 0 Students 0	FT: 1 PT: 3	Yes
PARA 220	Paramedic II	1	7	Sections 1 Students 9	Sections 0 Students 0	Sections 0 Students 0	FT: 1 PT: 3	Yes

	Topic Assessed	I	II	III	IV	Total # of Students
EMT 105: EMT	Knowledge Cognitive	0	3	13	7	23
	Medication Administration	0	1	14	8	23
		0%	8%	59%	33%	
PARA 210 Paramedic 1	Knowledge Cognitive	0	1	4	5	10
	Medication Administration	0	0	10	0	10
		0%	5%	70%	25%	
PARA 220 Paramedic II	Knowledge Cognitive	0	0	10	0	10
	Medication Administration	0	0	10	0	10
		0%	0%	100%	0%	

Assessment Results:

EMT 105 the basic level of EMS there were 8% of the students that fell into level II, 59% in level III and 33% of the students reached mastery level IV, PARA 210, 5% of the students were in level II, 70% at level III and 25% at mastery level IV, PARA 220, 100% of the students scored at level III as competent.

Analysis:

In assessing PLO #5, three courses used. In these courses the faculty are the evaluators, and consistency is assured in this data. The faculty evaluate the students for PLO #5 using course level outcomes for EMT 105 the CLO #1, *Assess the nature and seriousness of the patient's condition or extent of injuries to provide emergency medical care.* PARA 210 CLO #6 and PARA 220 CLO #3, both courses use the same CLO expression; *Use the principles of anatomy and physiology and pharmacology for pre-hospital patient encounters.* While

assessing each of these courses the evaluator looks at knowledge, and medication administration using the EMT medical exam, PARA 210 pharmacy exam and PARA 220 a patient assessment scenario.

Use of Results for Improvement

The students are meeting the expected competencies, however, looking deeply at the rubric there needs to be some changes made. The changes in the rubric will be to the wording that describes the level of learning. The artifact currently used is exams for the beginning classes, the faculty will add the use of scenarios to enhance the written exams. I would also like to add PARA 230 into the assessment of this outcome.

What is the proposed timeline for the changes outlined above?

The proposed timeline for the changes is SLO 2024-25.

EMT level will use the exam and scenario for every cohort starting fall 2024.

Paramedic will use the exam and multiple scenarios throughout the cohort starting fall 2024.

Additional Summary Notes

Anomalies in the results that were noticed:

No anomalies noted in the data.

Were there any patterns in the data observed?

There were patterns noticed in the data.

- Consistency of the faculty assessing the student weaker than the preceptors in the clinical internship. Could be several reasons worth investigating, faculty holds the student to a higher expectation, the realism of caring for a live patient makes the student try harder to meet the expectations, the evaluation sheet the evaluator uses is not clear for expectations, or the preceptor does not take the time to fill the form out accurately.
 - Needs evaluated.
- Not all EMS classes are assessed in each program outcome.
 - Problem or not, worth looking into.
- Multiple rubrics are not clear on the verbiage assessing the student and or does not fit the artifact or course.
 - Very problematic and is being changed.

Addendum

Program Name:

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 20XX-XX SLO report. (Use as many pages as necessary to describe.)

Begin Text Here.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

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THREE RIVERS COLLEGE

Practical Nursing

Program Level SLO Report

Andrea Pierce – Program Director

Calendar Year 2023

Program Purpose Statement

The purpose of the Practical Nursing program at Three Rivers College is to prepare students to achieve a one-year certificate in Practical Nursing and be successful in obtaining licensure as a Licensed Practical Nurse. The Practical Nursing program instills knowledge, skills, and professional values to prepare individuals to enter the workforce and provide safe, effective nursing care for clients in a variety of healthcare settings.

Program Outcomes

1. Utilize the nursing process to provide safe client care within a healthcare team.
(Application)
2. Interpret clients' diverse backgrounds across the lifespan to provide individualized nursing care. (Application)
3. Use effective communication as a member of the healthcare team. (Application)
4. Demonstrate safe, effective nursing care within the scope of practice for the practical nurse while maintaining legal/ethical standards. (Application)
5. Discover strategies to promote personal success. (Application)
6. Apply basic knowledge of mathematics; anatomy and physiology; and human growth and development to the practical nurse role. (Application)

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

Practical Nursing: Program Outcomes Mapping

Program Outcome 1:	
Utilize the nursing process to provide safe client care within a health care team.	
NCLEX Category(s): Coordinated Care	
Course	Course Learning Outcome (CLO)
PNRS 105: Personal and Vocational Concepts	Describe the role of the licensed practical Nurse as an effective member of the healthcare team. (CLO3)
	Identify the practical nurse's role in utilizing the nursing process. (CLO 4)
PNRS 115: Fundamentals of Nursing	Demonstrate safe nursing care to meet the basic physiological needs of the client. (CLO 1)
PNRS 127: Mental Health Nursing	Utilize the nursing process to assist in planning individualized care to clients with mental health disorders. (CLO 1) Identify various types of common mental health illnesses. (CLO 3)
PNRS 118: Medical Surgical Nursing I	Demonstrate safe, individualized nursing care to clients with select medical-surgical disorders. (CLO 1)
PNRS 119: Medical Surgical Nursing II	Demonstrate safe, individualized nursing care to clients with select medical-surgical disorders. (CLO 1)

Program Outcome 2:**Interpret client's diverse backgrounds across the lifespan to provide individualized nursing care.****NCLEX Category:
Coordinated Care; Health Promotion and Maintenance; Psychosocial Integrity**

Course	Course Learning Outcome (CLO)
PNRS 105: Personal and Vocational Concepts	Discuss cultural diversity and spirituality. (CLO 8)
PNRS 115: Fundamentals of Nursing	Recognize adaptations in nursing care associated with the geriatric client. (CLO 4)
PNRS 125: Maternal/Newborn Nursing	Demonstrate safe nursing care with the postpartum client. (CLO 5).
	Apply nursing knowledge to the care of the newborn. (CLO 6)
PNRS 116: Pediatric Nursing	Demonstrate safe nursing care for the pediatric client. (CLO 2)
	Explain adaptations of care for the pediatric client. (CLO 3)

Program Outcome 3:**Use effective communication as a member of the health care team.****NCLEX Category:
Coordinated Care; Health Promotion and Maintenance; Psychosocial Integrity;
Physiological Adaptation**

Course	Course Learning Outcome
PNRS 105: Personal and Vocational Nursing	Recognize Communication techniques. (CLO 5)
PNRS 115: Fundamentals of Nursing	Use effective communication skills in the clinical setting. (CLO 2)
	Identify the teaching-learning process to address individualized client needs. (CLO 3)
PNRS 118: Medical Surgical Nursing I	Apply therapeutic communication when caring for a medical-surgical client. (CLO 2)
PNRS 126: Pharmacology	Summarize basic principles of pharmacology. (CLO 1) Identify medications based on pharmacological classifications and representative medications. (CLO 3)
PNRS 119: Medical Surgical Nursing II	Apply therapeutic communication when caring for a medical-surgical client. (CLO 2)

PNRS 127: Mental Health Nursing	Discuss therapeutic communication strategies used in the mental health setting. (CLO 2)
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Program Outcome 4:	
Demonstrate safe, effective nursing care within the scope of practice for the practical nurse while maintaining legal/ethical standards.	
NCLEX Category: Coordinated Care; Safety and Infection Control; Health Promotion and Maintenance; Basic Care and Comfort; Reduction of Risk Potential; Physiological Adaptation	
Course	Course Learning Outcome (CLO)
PNRS 105: Personal and Vocational Concepts	Discuss the legal and ethical frameworks related to nursing practice. (CLO 6)
	Explain quality improvement processes. (CLO 7)
PNRS 115: Fundamentals of Nursing	Understand basic nutrition to promote optimal health in clients. (CLO 5)
PNRS 117: Intravenous Therapy	Recognize the scope of practice for the licensed practical nurse in performing intravenous therapy. (CLO 1)
	Summarize knowledge of parental solutions. (CLO 2)
	Demonstrate safe peripheral venous access, maintenance, and discontinuation. (CLO 3)
	Recognize potential intravenous therapy-related local and systemic complications. (CLO 4)
	Identify various types of equipment used for intravenous therapy. (CLO 5)
PNRS 118: Medical Surgical Nursing I	Demonstrate the role of the practical nurse in the medical-surgical setting. (CLO 3)
	Relate health promotion and maintenance strategies to the medical-surgical client. (CLO 4)
PNRS 119: Medical Surgical Nursing II	Demonstrate the role of the practical nurse in the medical-surgical setting. (CLO 3)
	Relate health promotion and maintenance strategies to the medical-surgical client. (CLO 4)
PNRS 126: Pharmacology	Apply nursing implications related to pharmacological therapy. (CLO 2)
PNRS 125: Maternal Newborn Nursing	Discuss health promotion strategies specific to sexually transmitted infections. (CLO 2)
	Summarize various methods of contraception. (CLO 3)
	Describe the role of the Licensed Practical Nurse in assisting with the labor and delivery process. (CLO 4)

Program Outcome 5:	
Discover strategies to promote personal success.	
NCLEX Category: under revue	
Course	Course Learning Outcome (CLO)
PNRS 105: Personal and Vocational Concepts	Identify strategies that will help ensure success in the practical nurse program. (CLO 1)
PNRS 128: Leadership and Management	Recognize leadership roles of the Licensed Practical Nurse. (CLO 1)
	Employ strategies for the transition into the role of the graduate nurse. (CLO 2)
	Explore the NCLEX-PN test plan in preparation for the NCLEX-PN. (CLO 3)

Program Outcome 6:	
Apply basic knowledge of mathematics; anatomy and physiology; and human growth and development to the practical nurse role.	
NCLEX Category:	
Health Promotion and Maintenance, Pharmacological Therapies	
Course	Course Learning Outcome (CLO)
PNRS 105: Personal and Vocational Concepts	Discuss nursing history and trends. (CLO 2)
PNRS 115: Fundamentals of Nursing	Solve mathematical calculations related to medication administration. (CLO 6)
PNRS 117: Intravenous Therapy	Demonstrate knowledge of basic intravenous therapy calculations. (CLO 6)
PNRS 125: Maternal-Newborn Nursing	Discuss normal reproduction and expected physiological changes in pregnancy. (CLO 1)
PNRS 116: Pediatric Nursing	Recognize normal growth and development milestones. (CLO 1)

Introduction

The program outcomes for the one-year certificate in Practical Nursing reflect competency for an entry level practical nursing graduate. This includes skills learned, demonstrated, and performed independently and knowledge related to the care of a client.

Artifacts used to measure the outcomes came from the following courses:

- PNRS 105, Personal and Vocational Concepts
- PNRS 115, Fundamentals of Nursing
- PNRS 116, Pediatric Nursing
- PNRS 119, Medical Surgical Nursing II
- PNRS 128, Leadership and Management

The data analyzed for this report came from various exams and clinical performances for the 2023 cohort. The information in this report will be used to make improvements in the Practical Nursing program to improve the quality of student learning.

For interpretation of the rubrics in this document, consider the following:

- Level IV – Mastery level. Students scoring at this level achieved a 92%-100%, on the associated assessment.
- Level III – Competent level. Students scoring at this level achieved an 80%-91%, on the associated assessment. All PN students must pass with an 80% or higher to advance.
- Level II – Novice level. Students scoring at this level achieved a 71%-79% on the associated assessment and did not advance in the program.
- Level I – No evidence. Students scoring at this level failed either class, clinical, or lab with a score below 70%, or U for unsafe in the associated assessment and did not advance in the program.

Program Outcome #1 Rubric

Utilize the nursing process to provide safe client care within a healthcare team.

Competency Areas	I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)
Nursing Process	Cannot understand how to utilize the nursing process to provide client care as part of the healthcare team.	Has very little understanding of how to utilize the nursing process to provide client care as part of the healthcare team.	Has a basic understanding of how to utilize the nursing process to provide client care as part of the healthcare team.	Fully understands how to utilize the nursing process to provide client care as part of the healthcare team.

Program Outcome #1

Utilize the nursing process to provide safe client care within a healthcare team.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Online Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PNRS 105	Personal and Vocational Concepts	2	52	Sections: 2 Students: 52	Sections: 0 Students: 0	Sections: 0 Students: 0	FT: 2 PT: 0	Y

		I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)	Total # of Students
PNRS 105-001	Course Final Exam	1	1	14	15	31
	%	3%	3%	45%	48%	
PNRS 105-710	Course Final Exam	0	0	11	10	21
	%	0%	0%	52%	48%	

Assessment Results:

The final exam for PNRS 105 is used as the artifact for this outcome. Students learn the nursing process in this course and must pass the final exam to continue in the program.

This program outcome is assessed early in the program because students who cannot

understand and utilize the nursing process from the beginning cannot meet other program outcomes.

Of the 52 students completing the artifact, 50% (26 students) scored in competency area IV, 48% (25 students) scored in competency area III, and 1 student scored in competency area II. That student did not continue in the program.

Analysis:

This course was offered as a hybrid course for the 2023 cohort. 98% (51 students), had the minimum of a basic understanding of how to utilize the nursing process to provide care for a client as a member of the healthcare team. One student in the Poplar Bluff location was unsuccessful in the course and was not able to advance in the program.

Use of Results for Improvement: Program Outcome #1

The final exam for PNRS 105 will continue to be used as the artifact to assess this outcome moving forward. The faculty recognize that exams are not always the best assessment tool for measuring program outcomes and will be looking at more advanced item analysis options for exams to better pull data related strictly to the nursing process on the final exam.

Overall, the faculty were pleased with the results of PNRS 105 as a hybrid model but feel that the course could and should be offered completely online beginning with the 2024 cohort. The program has been looking for ways to decrease the number of hours students must be on campus for classes to help those that need to continue to work and those that may struggle with babysitting. The faculty believe that there are not many classes in the PN program that allow the flexibility of online learning, but PNRS 105 is a class that could easily transition into an 8-week online class in the A session of Spring semester. The

faculty believe this will also be helpful in the event of school closure due to winter weather. The Missouri State Board of Nursing (MOSBN) does require all PN students to have a tour of the campus library, so to meet that minimum standard, the students will have a 3.5-hour orientation to PNRS 105 on their respective campus that will include a library tour.

The faculty do not feel that this change will alter the measurement of this outcome, or the students' ability to meet the outcome.

Proposed Timeline: Program Outcome #1

- Change in modality PNRS 105 – Spring 2024
- Effectiveness of online delivery will be examined in the spring of 2025 following student and faculty feedback
- Add HESI categories as a data point – Spring 2025

Program Outcome #2 Rubric

Interpret clients' diverse background across the lifespan to provide individualized nursing care.

Competency Areas	I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)
Application to Lifespan Stages Pediatrics (Sub 1)	Cannot recognize developmental factors specific to pediatric stage of lifespan and cannot adapt care based on these factors.	Shows awareness of developmental factors specific to pediatric stage of lifespan but struggles to adapt care based on these factors.	Recognizes and interprets key developmental factors specific to pediatric stage of lifespan and generally adapts care based on these factors.	Consistently recognizes and interprets developmental factors specific to pediatric stage of lifespan and adapts care based on these factors.
Client-Centered Care (Sub 2)	Cannot provide individualized care, ignoring the client's values, beliefs, and preferences while planning care.	Provides partially individualized care, but misses key opportunities to incorporate the client's values, beliefs, and preferences while planning care.	Provides generally individualized care with minor lapses in tailoring to the client's specific background or needs, often incorporates the client's values, beliefs, and preferences while planning care.	Provides highly individualized care that reflects a comprehensive understanding of each client's unique background and needs, incorporating the client's values, beliefs, and preferences while planning care.

Program Outcome #2

Interpret clients' diverse backgrounds across the lifespan to provide individualized nursing care.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PNRS 116 (SUB 1)	Pediatric Nursing	2	39	Sections: 2 Students: 39	Sections: 0 Students: 0	FT: 2 PT: 0	Y
PNRS 128 (SUB 2)	Leadership and Management	2	39	Sections: 2 Students: 39	Sections: 0 Students: 0	FT: 2 PT: 0	Y

	SUB 1	I (<70)	II (71-79%)	III (80-91%)	IV(92-100%)	Total # of Students
PNRS 116-001	Course Final Exam	0	5	20	2	27
	%	0%	19%	74%	7%	
PNRS 116-710	Course Final Exam	0	0	11	1	12
	%	0%	0%	92%	8%	

	SUB 2	I (<750)	II (750-849)	III (850-899)	IV(>900)	Total # of Students
PNRS 128-001	Comprehensive HESI	4	8	4	11	27
	%	15%	30%	15%	41%	
PNRS 128-710	Comprehensive HESI	0	4	2	6	12
	%	0%	33%	17%	50%	

Assessment Results: Program Outcome #2:

The final exam in PNRS 116, Pediatric Nursing, is one of the assessment artifacts used and is labeled SUB 1. The other artifact is the Comprehensive HESI exam in PNRS 128, labeled SUB 2. These artifacts each have their own unique scoring, as illustrated in the above tables.

Of the 39 students completing the artifact in SUB 1, less than 1% (3 students) scored in competency area IV, 79% (31 students) scored in competency area III, 13% (5 students) scored in competency area II, and there were no students who scored in competency area I.

Of the 39 students completing the artifact in SUB 2, 44% (17 students) scored in competency area IV, 15% (6 students) scored in competency area III, 31% (12 students) scored in competency area II, and 10% (4 students) scored in competency area I.

Analysis: Program Outcome #2:

During the 2023 cohort, most students scored in competency area III or above. Five students at the Poplar Bluff location scored in competency area II, which is below the passing standard of 80%. These students were able to pass the course, PNRS 116, even with a less than passing grade on the final exam. Faculty believe this is because those 5 students had an overall course grade that was well above the 80% passing mark and did not study for the final exam. Students also have a final exam in PNRS 119 during the same week, and faculty notice that students historically study harder for the course they have a lower grade in.

SUB 2 data shows student performance on the Comprehensive HESI examination offered in PNRS 128. This exam mimics the NCLEX-PN in content and is used as a tool to measure the student's preparedness for licensure exam. During the 2023 cohort, 22 students who did not meet the recommended 900-point benchmark were given remediation packets and had to take a second version of the Comprehensive HESI exam following their NCLEX-PN live review. Scores shown in this report are the first attempt scores. Of the 22 students that took the version 2 Comprehensive HESI, 17 scored at competency level III or above. 3 of the 22 students scored at competency level II and 2 of the 22 students scored at competency level I. Those students did pass their NCLEX-PN on the first attempt.

Faculty recognize the usefulness of all students taking a version 2 Comprehensive HESI for data collection and plan to adjust accordingly with the 2024 cohort.

Use of Results for Improvement: Program Outcome #2:

These two artifacts will continue to be used to assess this outcome moving forward. The final exam in SUB 1 assesses the students' understanding of lifespan changes in the pediatric client and SUB 2 assesses overall understanding of care across the lifespan by including all ages from newborn to elderly. Based on the above assessment data, the faculty do not anticipate any major curriculum changes for the 2024 cohort. The faculty do believe that since the students who scored in competency area II in SUB 1 were successful in the course, the scores do not reflect a curriculum problem. Of the 5 students who scored in competency area II in SUB 1, 3 of them scored in competency area IV in SUB II. The other 2 scored in competency area II in SUB II.

The faculty will be exploring more detailed item analysis options for exams used as assessment tools moving forward. Subcategories on the comprehensive HESI will also be considered as an assessment tool.

Faculty do recognize the benefit in having all students complete versions 1 and 2 of the Comprehensive HESI Exam moving forward. Beginning with the 2024 cohort, students will take version 1 and complete any remediation packets provided to them by the testing entity. They will then attend the live NCLEX-PN review and take version 2 of the Comprehensive HESI.

We do not believe that the final HESI should be the primary indicator of student achievement, based on the results as compared to the NCLEX-PN pass rate. It is one of several tools used to gauge student progress and test readiness for the licensure exam.

Proposed Timeline: Program Outcome #2:

- Change HESI testing Fall 2024
- Review item analysis tools Spring 2025
- Add HESI categories as a data point – Fall 2025

Program Outcome #3 Rubric

Use effective communication as a member of the healthcare team.

Competency Areas	I (<70%)	II (71-79%)	III (80-91%)	IV(92-100%)
Communication Skills	Fails to communicate; does not engage with patients or team members, leading to misunderstandings.	Communication is unclear or ineffective; lacks professionalism and fails to show empathy.	Communicates clearly with patients and team; shows good professionalism and empathy with minor issues.	Communicates clearly and effectively with patients and team members; shows empathy and professionalism.
Team Collaboration & Coordination	Limited collaboration with the healthcare team. Frequently misses opportunities to share information, assist team members, or coordinate tasks.	Participates in team collaboration but may struggle to coordinate tasks or share information in a timely manner. Needs occasional reminders to stay engaged.	Collaborates well with the team, sharing information and participating in coordination efforts. Occasionally requires prompting to share updates or help others.	Works seamlessly with the healthcare team, contributing to a collaborative environment. Effectively coordinates tasks, shares relevant information, and supports team members.

Program Outcome #3

Use effective communication as a member of the health care team.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PNRS 119	Medical Surgical Nursing II	2	39	Sections: 0 Students: 39	Sections: 0 Students: 0	FT: 4 PT: 0	Y

		I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)	Total # of Students
PNRS 119-001	Clinical Performance	0	0	16	11	27
	%	0%	0%	59%	41%	

PNRS 119-710	Clinical Performance	0	0	5	7	12
	%	0%	0%	42%	58%	

Assessment Results: Program Outcome #3:

Communication is taught and built upon throughout the program. The faculty believe that the best assessment for this outcome is through the clinical experience of team leader. This assignment requires the students to be a charge nurse for the day and their success relies heavily on their ability to communicate with multiple members of the interdisciplinary healthcare team in the acute care setting. Students are encouraged to call and speak with pharmacists, lab technicians, and others involved in the care of their patients. Students also work closely with the primary nurse for their assigned patients and become more comfortable in that role.

The artifact used to measure this outcome is student performance in PNRS 119 clinical. This is the point in the program where each student is assigned the role of team leader. This role involves communication not only with other students and faculty but also involves a more significant role in communicating with members of the healthcare team in the acute care setting.

Of the 39 students completing the artifact, 46% (18 students) scored in competency area IV and 54% (21 students) scored in competency area III. There were no students scoring in competency areas II or I.

Analysis: Program Outcome #3:

Overall, the faculty are satisfied with the results demonstrated by the students who completed this artifact. The faculty believe that there is room for improvement in the clinical assessment tool used to measure this artifact.

Use of Results for Improvement: Program Outcome #3:

The clinical experience of team leader will continue to be the artifact used to assess this outcome moving forward. For the 2024 cohort, there will be two changes made to enhance assessment of this outcome.

The faculty will try to create more clinical opportunities for students to practice as a leader in the clinical setting prior to the final assessment in PNRS 119. Currently, students are introduced to concepts of communication in the classroom early in the program and those concepts are reinforced throughout the program. Creating more clinical opportunities will be somewhat dependent on the clinical setting and the number of both students and clinical educators.

A new clinical grading tool will also be developed that more accurately assess the team lead role and responsibility. Currently the team lead role is graded on the same evaluation tool as the students' other clinical days.

Proposed Timeline: Program Outcome #3:

- Updated clinical tool trial: Fall 2024
- Updated clinical tool used for assessment: Fall 2025
- Add HESI categories as a data point – Fall 2025

Program Outcome #4 Rubric

Demonstrate safe, effective nursing care within the scope of practice for the practical nurse while maintaining legal/ethical standards.

Competency Areas	I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)
Adherence to Scope of Practice	Fails to recognize the legal boundaries of the practical nurse role. Requires significant supervision.	Shows some understanding of the scope of practice but requires frequent guidance to ensure compliance.	Demonstrates a solid understanding of the scope of practice. Performs tasks within legal boundaries, seeking clarification on scope limits.	Consistently demonstrates a comprehensive understanding of the scope of practice for a practical nurse. Skillfully performs all tasks within legal boundaries.

Program Outcome #4

Demonstrate safe, effective nursing care within the scope of practice for the practical nurse while maintaining legal/ethical standards.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PNRS 128	Leadership and Management	2	39	Sections: 2 Students: 39	Sections: 0 Students: 0	FT: 4 PT: 0	Y

		I (<750)	II (750-849)	III (850-899)	IV (>900)	Total # of Students
PNRS 128-001	Comprehensive HESI	4	8	4	11	27
	%	15%	30%	15%	41%	
PNRS 128-710	Comprehensive HESI	0	4	2	6	12
	%	0%	33%	17%	50%	

Assessment Results: Program Outcome #4:

The Comprehensive HESI exam tests students on the knowledge they have acquired throughout the duration of the program.

Of the 39 students completing the artifact, 44% (17 students) scored in competency area IV, 15% (6 students) scored in competency area III, 31% (12 students) scored in competency area II, and 10% (4 students) scored in competency area I.

Analysis: Program Outcome #4:

As previously mentioned, this data shows student performance on the Comprehensive HESI examination offered in PNRS 128. This exam mimics the NCLEX-PN in content and is used as a tool to measure the student's preparedness for licensure exam. During the 2023 cohort, 22 students who did not meet the recommended 900-point benchmark were given remediation packets and had to take a second version of the Comprehensive HESI exam following their NCLEX-PN live review. Scores shown in this report are the first attempt scores. Of the 22 students that took the version 2 Comprehensive HESI, 17 scored at competency level III or above. 3 of the 22 students scored at competency level II and 2 of the 22 students scored at competency level I. Those students did pass their NCLEX-PN on the first attempt.

Once again, the faculty recognize the usefulness of all students taking a version 2 Comprehensive HESI for data collection and plan to adjust accordingly with the 2024 cohort.

Use of Results for Improvement: Program Outcome #4:

The Comprehensive HESI exam will continue to be used as the artifact to assess this outcome moving forward. Two versions will be given to students moving forward to collect more accurate data. Beginning with the 2024 cohort, students will take version 1 and complete any

remediation packets provided to them by the testing entity. They will then attend the live NCLEX-PN review and take version 2 of the Comprehensive HESI.

Proposed Timeline: Program Outcome #4:

- Change in HESI testing: Fall 2024
- Add HESI categories as a data point – Fall 2025

Program Outcome #5 Rubric

Discover strategies to promote personal success.

Competency Areas	I	II	III	IV
Identification of Personal Success Strategies	Struggles to identify relevant strategies for personal success. Lacks understanding of the connection between strategies and success. Requires significant support.	Shows basic awareness of some success strategies but lacks depth or specificity. Needs guidance to identify and fully understand effective personal success strategies.	Identifies key strategies for personal success and shows a good understanding of their importance. Some strategies may need further development or refinement to fully support success.	Effectively identifies a wide range of strategies (time management, stress management, self-care, goal setting, etc.) that contribute to personal and academic success. Demonstrates a clear understanding of how these strategies support overall well-being and performance.

Program Outcome #5

Discover strategies to promote personal success.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved ?
PNRS 105	Personal and Vocational Concepts	2	52	Sections: 2 Students: 52	Sections: 0 Students: 0	FT: 2 PT: 0	Y

	Topic Assessed	I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)	Total # of Students
PNRS 105-001	Final Exam	1	1	14	15	31
	%	3%	3%	45%	48%	
PNRS 105-710	Final Exam	0	0	10	11	21
	%	0%	0%	48%	52%	

Assessment Results: Program Outcome #5:

Item analysis for the final exam in PNRS 105 is used as the artifact for this outcome. Students learn student success strategies in this course and must pass the final exam to continue in the program. This program outcome is assessed early in the program because students who cannot implement the success strategies will not be successful in the completion of the program.

Of the 52 students completing the artifact, 50% (26 students) scored in competency area IV, 48% (25 students) scored in competency area III, and 1 student scored in competency area II. That student did not continue in the program.

Analysis: Program Outcome #5:

Student success strategies are important in the fast-paced PN program and many of our students are either non-traditional students or new high school graduates. The faculty have noticed that both groups often struggle with developing study habits that help create success at the college level. For the 2023 cohort, there were no prerequisite courses that incoming LPN students had to have, which is why student success strategies is taught in PNRS 105 and evaluated at this point.

Use of Results for Improvement: Program Outcome #5:

The PNRS 105 final exam will continue to be used as the artifact to assess this outcome moving forward. The only change for the 2024 cohort will be the change in modality as previously mentioned in this report.

With the new requirement of GNST 100, New Student Orientation, for all certificate level programs, students will be required to take that either prior to the program, or during the first semester of the program.

Proposed Timeline: Program Outcome #5:

- Change in modality for PNRS 105 from hybrid to online – Spring 2024
- Addition of GNST 100 to course as pre/corequisite Spring 2025

Program Outcome #6 Rubric

Apply basic knowledge of mathematics; anatomy and physiology; and human growth and development to the practical nurse role.

Competency Areas	I (<70%)	II (71-79%)	III (80-91%)	IV (92-100%)
Application of Mathematics in Nursing Practice (Sub 1)	Struggles to apply mathematical concepts correctly, frequently making errors in calculations or failing to understand conversions. Cannot pass dosage calculation exam within 3 attempts.	Demonstrates basic understanding of mathematical concepts but frequently needs assistance with calculations. Cannot pass dosage calculation exam within 3 attempts.	Accurately applies mathematical concepts in most situations, and generally avoids significant errors. Passes dosage calculation exam with a B or C within 3 attempts.	Consistently applies mathematical concepts accurately in dosage calculations and conversions. Passes dosage calculation exam with an A on first attempt.
Understanding of Human Growth & Development (Sub 2)	Fails to understand or apply knowledge of human growth and development in nursing practice. Care is not adjusted according to the patient's developmental needs. Requires significant support.	Demonstrates a basic understanding of human growth and development but inconsistently applies this knowledge in patient care. Often requires support to tailor interventions appropriately.	Shows a solid understanding of growth and development stages. Usually adjusts care appropriately based on the patient's age or developmental needs, with occasional guidance.	Demonstrates comprehensive understanding of human growth and development across the lifespan. Applies this knowledge to tailor nursing care according to the developmental stage of the patient.

Program Outcome #6

Apply basic knowledge of mathematics; anatomy and physiology; and human growth and development to the practical nurse role.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Dual Credit Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
PNRS 115	Fundamentals of Nursing	2	50	Sections: 2	Sections: 0	FT: 5	Y

SUB 1				Students: 50	Students: 0	PT: 0	
PNRS 116 SUB 2	Pediatric Nursing	2	39	Sections: 2 Students: 39	Sections: 0 Students: 0	FT: 2 PT: 0	Y

		I	II	III	IV	Total # of Students
PNRS 115-001	Dosage Calculation Exam	0	0	4	26	30
	%	0%	0%	13%	87%	
PNRS 115-710	Dosage Calculation Exam	0	0	2	16	18
	%	0%	0%	11%	89%	
PNRS 116-001	Course Final Exam	0	5	20	2	27
	%	0%	19%	74%	7%	
PNRS 116-710	Course Final Exam	0	0	11	1	12
	%	0%	0%	92%	8%	

Assessment Results: Program Outcome #6:

The artifact used to measure SUB I, is the dosage calculation exam offered in PNRS 115. The Missouri Board of Nursing requires all PN students pass a medication math exam to remain in the program. Students have 3 opportunities to pass the exam. Of the 48 students who completed the artifact, 88% (42 students) scored at competency level IV, passing the dosage calculation exam on the first attempt. 13% (6 students) scored at competency level III, passing the dosage calculation exam on the second attempt. There were not any students that scored in competency levels II or I.

Medication dosage calculation is taught in our PNRS 115 course as a component of medication administration. It is a Missouri State Board of Nursing requirement that students pass a medication administration exam to continue in a program of practical nursing. Students

have 3 attempts to pass the exam with an 80% or higher. In 2023, most students in both groups passed the exam on their first attempt. Those that did not pass the exam on the first attempt were able to pass on the second attempt with no student needing a third attempt.

The final exam in PNRS 116 is the artifact used for SUB 2. Human Growth and Development concepts are taught in our pediatric nursing course, PNRS 116. Of the 39 students completing the artifact, 0.07% (3 students) scored in competency area IV, 79% (31 students) scored in competency area III, 13% (5 students) scored in competency area II.

Students also take Human Growth and Development across the Lifespan, PSYC 243 during their summer block. This course is not reflected in the PN SLO report because it is taught outside of the program. We look for confirmation of understanding of these skills through the assessment associated with PNRS 116.

Analysis: Program Outcome #6:

Students take PSYC 243 during the summer block of the program unless they have previously taken the course and scored a B or better. The Missouri State Board of Nursing does require students to understand human growth and development across the lifespan and previous administration believed this was the best approach to meet that minimum standard. During the 2023 cohort all students who took PSYC 243 during the program were successful and able to continue in the PN program. The scores in PNRS 116 support the conclusion that PN students do not need to take this additional class.

Use of Results for Improvement: Program Outcome #6:

These two artifacts will continue to be used to assess this outcome moving forward. Based on the data recorded for the dosage calculation exam, there will not be a curricular change made moving forward.

Based on feedback from students, a request was submitted to the Missouri Board of Nursing to remove PSCY 243 from the program and continue to incorporate the concepts of human growth and development across the lifespan throughout the program and specifically in PNRS 116. This request was approved by the Board of Nursing and will be implemented in Summer 2025.

Proposed Timeline: Program Outcome #6:

- Removal of PSYC 243 – Summer 2025
- Will continue to monitor student performance for evidence of understanding

Additional Summary Notes

Anomalies in the results that were noticed:

Several program outcomes are assessed in multiple ways because the faculty believe that both artifacts are important tools for assessment of achievement. The Comprehensive HESI exam is used in more than one spot because of the comprehensive nature of the exam and because it is used as a predictor for success on the licensure exam. However, the faculty do not believe that the Comprehensive HESI is the final indicator of student achievement, based on the results we see from the HESI as compared to the NCLEX-PN pass rate. It is one of several tools used to gauge student progress and is used for students to test their readiness for the licensure exam. Some students do not take the exam seriously, despite faculty's best efforts to emphasize its importance, and the grades often reflect that.

The faculty recognize that another possible way to use the HESI information would be to use the individual categories assessed by HESI as an assessment tool. The HESI exam results provide an item analysis of which topics the questions are assessing. The faculty believe that including this may be a better measurement of student achievement than just course exams.

The faculty believe that including course final exams can be an important tool to assess when determining student achievement of program outcomes. Students who are not successful in any course of the program cannot advance in the program. Frequently the final exam grade is the determining factor in a student's ability to pass the course. There is a downside to using these exams as an assessment. Students who have a high score in the course often time don't prepare for the final exam the way they should. Implementing a more detailed item analysis tool may help to better connect the achievement of the program learning outcome. The faculty do not believe this to be a curriculum problem, but rather a student problem.

The faculty recognize that the program outcomes as written are possibly too broad and hinder the assessment process. Developing new program outcomes is a planning priority for 2025.

For the most part, the Poplar Bluff and Sikeston locations score very similarly and there are not a lot of anomalies noted from location to location. The curriculum is the same across both locations and all classes are taught at the same time in each location.

Were there any patterns in the data observed?

This report shows similar patterns to previous reports as far as where students struggle and where students fail to remain in the program. There were some changes from 2022 to 2023. PNRS 107 was removed from the program in 2023 and PNRS 105 was moved to a hybrid modality. Student learning was not impacted by those changes, as scores were similar in 2023 as they were in 2022. The 2022 cohorts were smaller in each location, 20 students, due to a lack of faculty in both locations. Poplar Bluff added one full time faculty in fall 2022 which allowed an increase in 2023 admissions to the MOSBN approved 30. Sikeston had only 2 fulltime faculty and remained at 20 for the 2023 cohort by direction of MOSBN.



THREE RIVERS COLLEGE

Welding Technology
Program Level SLO Report
Drake Dugas Program Manager

2023-2024

Program Purpose Statement

Purpose: Career and Technical Education. The Welding Engineering Technology Welding program focuses on the knowledge and skills necessary to succeed within the manufacturing and maintenance profession. This degree prepares students for entry-level employment and provides a foundation for advancement in the industrial and manufacturing sectors.

Program Outcomes for 2023-2024

1. Recognize appropriate safety measures to apply in the welding environment.
2. Operate and prepare in cutting and preparation of metal.
3. Interpret, as well as illustrate, the terminology in welding prints and codes.
4. Create and weld in various weld positions.
5. Examine and identify discontinuities and defects in the weld, as well as identification of metal.
6. Operate machines and recognize when proper maintenance should be done.

Program Outcomes for 2024-2025

1. Recognize appropriate safety measures to apply in the welding environment.
2. Interpret and restate definitions, terminology, and symbols in welding prints.
3. Demonstrate welding techniques in various positions and applications.
4. Evaluate and identify Weld discontinuities and defects.
5. Differentiate the differences of metals, their makeup and uses.
6. Create designs and program various CNC equipment for use in fabrication.

The program approach to curriculum and assessment changed significantly in the spring of 2024 with a new program manager and in response to professional expectations in the field. As a result, it was determined appropriate to pursue the aims of this report through the new, rather than the former, outcomes.

Curriculum Mapping

Three Rivers College Program Managers review their program curriculum to align instruction to programmatic outcomes. The exercise of curricular mapping allows Program Managers to evaluate the curriculum in a broader perspective to develop and implement an assessment plan for the program, reveal any gaps in the curriculum, and identify areas where improvement interventions can be implemented. This curriculum mapping also provides the faculty improved communication amongst program faculty and students. The subsequent curriculum maps are arranged by program outcome to correspond with the Student Learning Outcomes provided within this report for the academic year.

The following reflects the mapping in place for fall 2023, under the former Program Manager.

Welding Technology: Program Outcomes Mapping

Program Outcome 1:	
Recognize appropriate safety measures to apply in the welding environment.	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the safety requirements for Shielded Metal Arc Welding (SMAW). (CLO 1)
	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 157: Introduction to GTAW	Demonstrate the safety requirements for Tungsten Inert Gas (TIG) electric welding equipment. (CLO 1)
	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 158: Introduction to GMAW	Develop the safety practices for the use of Gas Metal Arc Welding (GMAW) equipment. (CLO 1)
	Demonstrate fundamental procedures of Gas Metal Arc Welding (GMAW) and the ability to weld in various welding positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)

WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)
	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel. (CLO 4)
	Demonstrate the safety requirements for Thermal cutting and the equipment. (CLO 5)
WELD 165: Welding Blueprint Reading	Demonstrate safety requirements in a welding environment. (CLO 1)
WELD 169: Pipe Fitting	Describe the safety requirements for Pipe Fitting and the equipment. (CLO 1)
	Demonstrate the ability to fit-up in various positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match Fit-up drawings. (CLO 4)
WELD 255: Advanced GMAW	Develop safety practices and set up requirements for Metal Inert Gas electric welding equipment. (CLO 1)
	Demonstrate the ability to weld in all welding positions on multiple materials. (CLO 2)
	Apply welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 256: Advanced SMAW	Demonstrate the safe usage of Shielded Metal Arc Welding (SMAW) electric welding AC and DC power sources. (CLO 1)
	Demonstrate the ability to weld in all welding positions on multiple materials with multiple electrodes. (CLO 2)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 257: Advanced GTAW	Describe the safety requirements for Gas Tungsten Arc Welding electric welding equipment. (CLO 1)
	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 259: Advanced FCAW	Demonstrate the safety requirements for Flux Core Arc Welding (FCAW) electric welding equipment. (CLO 1)
	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)

Program Outcome 2:	
Operate and prepare in cutting and preparation of metal	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 157: Introduction to GTAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 158: Introduction to GMAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 159: Introduction to FCAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)
	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel. (CLO 4)
	Demonstrate the safety requirements for Thermal cutting and the equipment. (CLO 5)
WELD 169: Pipe Fitting	Demonstrate the ability to fit-up in various positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match Fit-up drawings. (CLO 4)
WELD 255: Advanced GMAW	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 256: Advanced SMAW	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 257: Advanced GTAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 259: Advanced FCAW	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)

Program Outcome 3:	
Interpret as well as illustrate the terminology in welding prints and codes.	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Collaborate by using appropriate terminology with individuals, team members, and other welding professionals. (CLO 5)

WELD 157: Introduction to GTAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Collaborate by using appropriate terminology with other individuals and team members. (CLO 5)
WELD 158: Introduction to GMAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Collaborate with individuals and team members using appropriate terminology. (CLO 5)
WELD 159: Introduction to FCAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Collaborate with other individuals and team members using appropriate terminology. (CLO 5)
WELD 165: Welding Blueprint Reading	Demonstrate competency in interpreting weld blueprint part and assembly drawings. (CLO 2)
	Translate weld symbols and blueprint information. (CLO 3)
	Distinguish views, materials, measurements, and tolerances. (CLO 4)
	Construct orthographic three view weld drawings. (CLO 5)
WELD 167: Thermal Cutting	Use appropriate terminology and function in a professional manner in a team environment. (CLO 6)
	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)
WELD 169: Pipe Fitting	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel. (CLO 4)
	Demonstrate the ability to fit-up in various positions. (CLO 2)
	Recognize welding and fit-up symbols. (CLO 3)
WELD 255: Advanced GMAW	Use appropriate terminology and function in a professional manner in a team atmosphere. (CLO 5)
	Apply welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 256: Advanced SMAW	Collaborate with individuals and team members using appropriate terminology. (CLO 5)
	Apply welding symbols, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)

	Collaborate with individuals and team members using appropriate terminology. (CLO 6)
WELD 257: Advanced GTAW	Recognize welding symbols, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Use appropriate terminology and function in a professional manner in a team environment. (CLO 5)
WELD 259: Advanced FCAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry. (CLO 3)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
	Collaborate by using appropriate terminology with other individuals and team members. (CLO 5)

Program Outcome 4:	
Create and weld in various welding positions	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 157: Introduction to GTAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 158: Introduction to GMAW	Demonstrate fundamental procedures of Gas Metal Arc Welding (GMAW) and the ability to weld in various welding positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 159: Introduction to FCAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)
	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel. (CLO 4)
WELD 255: Advanced GMAW	Demonstrate the ability to weld in all welding positions on multiple materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)

WELD 256: Advanced SMAW	Demonstrate the ability to weld in all welding positions on multiple materials with multiple electrodes. (CLO 2)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 257: Advanced GTAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 259: Advanced FCAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)

Program Outcome 5:

Examine and identify discontinuities and defects in the weld as well as identification of metal

Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 157: Introduction to GTAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 158: Introduction to GMAW	Demonstrate fundamental procedures of Gas Metal Arc Welding (GMAW) and the ability to weld in various welding positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 159: Introduction to FCAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 165: Welding Blueprint Reading	Distinguish views, materials, measurements, and tolerances. (CLO 4)
WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)
	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel. (CLO 4)
WELD 255: Advanced GMAW	Demonstrate the ability to weld in all welding positions on multiple materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)

WELD 256: Advanced SMAW	Demonstrate the ability to weld in all welding positions on multiple materials with multiple electrodes. (CLO 2)
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings. (CLO 4)
WELD 257: Advanced GTAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 259: Advanced FCAW	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)

Program Outcome 6:

Operate machines and recognize when proper maintenance should be done.

Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the safety requirements for Shielded Metal Arc Welding (SMAW). (CLO 1)
	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 157: Introduction to GTAW	Demonstrate the safety requirements for Tungsten Inert Gas (TIG) electric welding equipment. (CLO 1)
	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 158: Introduction to GMAW	Develop the safety practices for the use of Gas Metal Arc Welding (GMAW) equipment. (CLO 1)
	Demonstrate fundamental procedures of Gas Metal Arc Welding (GMAW) and the ability to weld in various welding positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 159: Introduction to FCAW	Demonstrate the safety requirement for Flux Core Arc Welding equipment. (CLO 1)
	Demonstrate the ability to weld in various weld positions. (CLO 2)
	Demonstrate cutting and fabrication techniques to match weld drawings. (CLO 4)
WELD 165: Welding Blueprint Reading	Demonstrate safety requirements in a welding environment. (CLO 1)
WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel. (CLO 1)
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel. (CLO 2)
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum. (CLO 3)

The following reflects the most recent mapping update, to be active beginning fall 2024.

Welding Technology: Program Outcomes Mapping

Program Outcome 1:	
Recognize appropriate safety measures to apply in the welding environment.	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the safety requirements for Shielded Metal Arc Welding (SMAW).
WELD 157: Introduction to GTAW	Demonstrate the safety requirements for Tungsten Inert Gas (TIG) electric welding equipment.
WELD 158: Introduction to GMAW	Develop the safety practices for the use of Gas Metal Arc Welding (GMAW) equipment.
WELD 159: Introduction to FCAW	Demonstrate the safety requirements for Flux-Cored Arc Welding (FCAW)
WELD 165: Welding Blueprint Reading	Demonstrate safety requirements in a welding environment.
WELD 256: Advanced SMAW	Demonstrate the safe usage of Shielded Metal Arc Welding (SMAW) electric welding AC and DC power sources.
WELD 257: Advanced GTAW	Describe the safety requirements for Gas Tungsten Arc Welding electric welding equipment.
WELD 258: Advanced GMAW	Develop safety practices and set up requirements for GMAW welding equipment.
WELD 259: Advanced FCAW	Demonstrate the safety requirements for Flux Core Arc Welding (FCAW) electric welding equipment.
WELD 265: Welding Fabrication	Demonstrate the safe use of oxy-fuel and electric welding equipment.

Program Outcome 2:	
Interpret and restate definitions, terminology, and symbols in welding prints.	
Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Collaborate by using appropriate terminology with other team members, and professionals.
WELD 157: Introduction to GTAW	Collaborate by using appropriate terminology with other team members, and professionals.
WELD 158: Introduction to GMAW	Collaborate by using appropriate terminology with other team members, and professionals.
WELD 159: Introduction to FCAW	Collaborate by using appropriate terminology with other team members, and professionals.

WELD 165: Welding Blueprint Reading	Demonstrate competency in interpreting weld blueprint part and assembly drawings.
	Translate weld symbols and blueprint information.
	Distinguish views, materials, measurements, and tolerances.
	Use appropriate terminology and function in a professional manner in a team environment.
WELD 169: Pipe Fitting	Recognize welding and fit-up symbols.
	Demonstrate cutting and fabrication techniques to match Fit-up drawings.
	Use welding terminology, and function in a professional team atmosphere.
WELD 256: Advanced SMAW	Recognize welding and fit-up symbols.
	Demonstrate cutting and fabrication techniques to match Fit-up drawings.
	Use welding terminology, and function in a professional team atmosphere.
WELD 257: Advanced GTAW	Recognize welding symbols, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match weld drawings.
	Use welding terminology, and function in a professional team atmosphere.
WELD 258: Advanced GMAW	Apply welding symbols, terminology, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings.
	Collaborate with individuals and team members using appropriate terminology.
WELD 259: Advanced FCAW	Recognize welding symbols, terminology, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match weld drawings
	Collaborate by using appropriate terminology with other individuals and team members.
WELD 265: Welding Fabrication	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings.
	Apply information from weld blueprints to fabricate complex parts and assemblies.
	Collaborate with individuals and team members using appropriate terminology.
	Employ print reading skills to differentiate welding symbols, weld joint nomenclature, and welding joint geometry.

WELD 266: Advanced SMAW 2	Demonstrate cutting and fabrication techniques to match weld drawings.
WELD 267: Advanced GTAW 2	Employ print reading skills to differentiate welding symbols, weld joint nomenclature, and welding joint geometry.
	Demonstrate cutting and fabrication techniques to match weld drawings.

Program Outcome 3:

Demonstrate welding techniques in various positions and applications.

Course	Course Learning Outcome (CLO)
WELD 156: Introduction to SMAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
WELD 157: Introduction to GTAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
WELD 158: Introduction to GMAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
WELD 159: Introduction to FCAW	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
WELD 166: Welding Inspection and Testing	Demonstrate how to perform weld repairs.
WELD 167: Thermal Cutting	Demonstrate manual oxyfuel gas cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness on carbon steel.
	Demonstrate Mechanized oxyfuel gas cutting (e.g., track burner) operations, making straight and bevel cuts in limited positions within a limited thickness range on carbon steel.
	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum.
	Demonstrate Manual air carbon arc cutting and gouging operations, making straight, bevel and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel.
WELD 169: Pipe Fitting	Demonstrate the ability to fit-up in various positions.
WELD 175: Introduction to Metallurgy	Apply correct techniques to correct distortion in welding.

WELD 256: Advanced SMAW	Demonstrate the ability to weld in all welding positions on multiple materials with multiple electrodes.
WELD 257: Advanced GTAW	Demonstrate the ability to weld in various weld positions.
WELD 258: Advanced GMAW	Demonstrate the ability to weld in all welding positions on multiple materials.
WELD 259: Advanced FCAW	Demonstrate the ability to weld in various weld positions.
WELD 265: Welding Fabrication	Demonstrate the ability to weld in all welding positions on multiple materials with multiple power sources.
WELD 266: Advanced SMAW 2	Demonstrate the ability to weld pipe in various weld positions using SMAW techniques.
WELD 267: Advanced GTAW 2	Demonstrate the ability to weld pipe in various weld positions using GTAW techniques.

Program Outcome 4:

Evaluate and identify Weld discontinuities and defects.

Course	Course Learning Outcome (CLO)
WELD 166: Welding Inspection and Testing	Apply different weld testing methods.
	Demonstrate their ability to test welds using the methods they have learned.
	Differentiate the difference between passing and failed welds using the methods they have learned.
WELD 256: Advanced SMAW	Evaluate weld quality using visual and guided bend tests.

Program Outcome 5:

Differentiate the differences of metals, their makeup and uses.

Course	Course Learning Outcome (CLO)
WELD 156 Introduction to SMAW (Shielded Metal ARC Welding)	Demonstrate the ability to weld in all positions using electrodes and select rod appropriate for materials.
WELD 165 Welding Blueprint Reading	Distinguish views, materials, measurements, and tolerances.
WELD 258 Advanced GMAW (Gas Metal Arc Welding)	Demonstrate the ability to weld in all welding positions on multiple materials.

WELD 256 Advanced SMAW (Shield Metal Arc) Welding	Demonstrate the ability to weld in all welding positions on multiple materials with multiple electrodes.
WELD 167 Thermal Cutting	Demonstrate Manual plasma arc cutting operations, making straight, bevel, and shape cuts, and base and weld metal removal in limited positions within a limited thickness range on carbon steel, stainless steel, and aluminum.

Program Outcome 6:

Create designs and program various CNC equipment for use in fabrication.

Course	Course Learning Outcome (CLO)
CIVL 125: Computer Aided Design and CNC Applications	Design parts and products using AutoCAD, Fusion 360, Vectric, and Plasticity.
	Setup and program CNC Routers, CNC Lasers, CNC Plasma Table, 3D Printers and Water Jets.
	Produce parts and products using various CNC equipment
WELD 169: Pipe Fitting	Demonstrate cutting and fabrication techniques to match fit up drawings.
WELD 265: Welding Fabrication	Demonstrate cutting and fabrication techniques to match complex weld assembly drawings.

Introduction

Graduates of the Welding Technology Program are expected to have the ability to confidently and safely use tools and equipment in the welding industry. Graduates of the program will have an entry level understanding of how to navigate welding blueprints and assemble them per the plans provided. Graduates will have the ability to confidently perform an entry level performance qualification test. The assessment data for these expectations are drawn from WELD 167 Thermal Cutting, WELD 256 Advanced SMAW and WELD 265 Welding Fabrication. WELD 166, Welding Inspection and Testing, has not been offered yet, but will be added as an assessment point for Program Outcome #4. The assignments used for the assessment data are demonstrations and AWS SENSE welding blueprints AWS EDU-1, AWS EDU-2, AWS EDU-3, AWS2-1, and AWS EDU-6. Program Outcome #6 will be assessed in future semesters through project work in CIVIL 125, Computer Aided Design and CNC Applications.

This SLO report is organized on current program learning outcomes. Due to personnel changes and disrupted student enrollment, we don't have access to data for the former program outcomes. This is the first year with revised outcomes so the data recorded will establish a baseline for further analysis.

Program Outcomes Rubric

PO 1: Recognize appropriate safety measures to work in welding environments.	I	III	III	IV
Recognize appropriate safety measures to work in welding environments.	Does not properly recognize safety measures for a welding environment.	Recognizes some safety requirements with assistance from instructor.	Recognizes safety requirements with little assistance from instructor.	Recognizes safety requirements with no assistance from instructor.
Practice appropriate safety measures to work in a welding environment.	Does not practice appropriate safety measures to work in a welding environment.	Practices some safety measures with assistance from instructor.	Practices safety measures with little assistance from instructor.	Practices safety measures with no assistance from instructor.

Program Outcome #1

Recognize appropriate safety measures to apply in the welding environment.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
WELD 167	Thermal Cutting	1	5	5	1	yes
WELD 265	Welding Fabrication	1	0	0	1	no

		I	II	III	IV	Total # of Students
WELD 167	#			3	2	5
	%			60%	40%	
WELD 265	#					
	%					

Assessment Results

In WELD 167 Thermal Cutting, students demonstrate how to safely operate a cutting torch in the presence of instructor and answer instructor's questions about the operation of the torch. In WELD 265 Welding Fabrication the students are given various AWS welding blueprints to fabricate and complete. Students are assessed on their ability to complete the blueprints safely using common tools in a welding environment.

Analysis

Students performed well physically demonstrating their ability to safely operate a cutting torch. WELD 265 did not have any returning students from the past welding instructor.

Use of Results for Improvement

This is the first year for the revised outcomes and with a new welding instructor, there will be more data to be collected in the coming year.

What is the proposed timeline for the changes outlined above?

More data is being collected as of fall of 24.

Program Outcome #2

Interpret and restate definitions, terminology, and symbols in welding prints.

PO 2: Interpret and restate definitions, terminology, and symbols in welding prints.	I	III	III	IV
Explain how to navigate through various welding prints.	Does not properly explain how to navigate.	Explains how to navigate properly with errors or assistance from instructor.	Explains how to navigate properly with little error or assistance from instructor.	Explains how to navigate properly with no errors or assistance from instructor.
State how to find required information on a welding print.	Fails to find required information.	Finds some information properly with errors or assistance from instructor.	Finds information properly with little error or assistance from instructor.	Finds information properly with no errors or assistance from instructor.
Specify how to read various plans and detail notes on a welding print.	Fails to specify how to read various plans and detail notes.	Specifies how to read various plans and detail notes with errors or assistance from instructor.	Specifies how to read various plans and detail notes with little error or assistance from instructor.	Specifies how to read various plans and detail notes with no errors or assistance from instructor.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
WELD 265	Welding Fabrication	1	0	0	1	no
WELD 256	Advanced SMAW	1	0	0	1	no

		I	II	III	IV	Total # of Students
WELD 265	#					0
	%					
WELD 256	#					0
	%					

Assessment Results

In WELD 265 Welding Fabrication students are given five different blueprints with various welding symbols and materials. Once the student has completed the fabrication of a blueprint they are analyzed for the accuracy of the completed blueprint. In WELD 256 Advanced SMAW students are given one blueprint a SMAW Performance Qualification Test (bend test). The students are then assessed on their ability to accurately complete the print per the welding symbols and cut and prepare test pieces to be bent per the blueprint instructions.

Analysis

There were no returning students from the past welding instructor so there was no data to analyze.

Use of Results for Improvement

Although there were no students in WELD 265 and WELD 256, we still believe these are the best classes to measure program outcome two.

What is the proposed timeline for the changes outlined above?

Data is being collected as of fall 24, there are currently students enrolled in those courses.

Program Outcome #3

Demonstrate welding techniques in various positions and applications.

PO 3: Demonstrate welding techniques in various positions and applications.	I	II	III	IV
Demonstrate welding techniques in various positions and applications.	Fails to demonstrate welding techniques in various positions and applications.	Demonstrates some welding techniques in various positions and applications with instructor assistance.	Demonstrates welding techniques in various positions and applications with little instructor assistance.	Demonstrates welding techniques in various positions and applications with no instructor assistance.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
WELD 265	Welding Fabrication	1	0	0	1	No

		I	II	III	IV	Total # of Students
WELD 265	#					0
	%					

Assessment Results

In WELD 265, Welding Fabrication students are given five different blueprints with various welding symbols, processes, and materials. The blueprints have required welding positions. Once the student has completed the fabrication of a blueprint the welds are analyzed for the quality of the completed welds in those positions.

Analysis

There were no returning students from the past welding instructor so there was no data to analyze.

Use of Results for Improvement

Although there were no students in WELD 265, we still believe this is the best classes to measure program outcome three.

What is the proposed timeline for the changes outlined above?

Data is being collected as of fall 24, there are currently students enrolled in those courses.

Program Outcome #4

Evaluate and identify Weld discontinuities and defects.

PO 4: Evaluate and identify weld discontinuities and defects.	I	II	III	IV
Evaluate and identify weld discontinuities/ defects.	Can't identify or evaluate weld discontinuities/ defects.	Identify and evaluates some weld discontinuities/ defects with instructor assistance.	Identify and evaluates weld discontinuities/ defects with little instructor assistance.	Identify and evaluates weld discontinuities/ defects with no instructor assistance.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
WELD 166	Welding Inspection and Testing	1	0	0	1	no
WELD 256	Advanced SMAW	1	0	0	1	no

		I	II	III	IV	Total # of Students
WELD 166	#					0
	%					
WELD 256	#					0
	%					

Assessment Results

In WELD 256 Advanced SMAW students are assessed on their ability to evaluate, identify, and repair weld defects on their SMAW Performance Qualification Test.

Analysis

WELD 256 was offered but there were no returning students from the past welding instructor so there was no data to analyze.

Use of Results for Improvement

Although there were no students in WELD 256 or WELD 166, we still believe these are the best classes to measure outcome four. The data collected will be included in the next SLO report. WELD 166, Welding Inspection and Testing, was added for the 2024-2025 catalog for and not yet offered at the time of this report.

What is the proposed timeline for the changes outlined above?

Data is being collected as of fall 24 and spring 25.

Program Outcome #5

Differentiate the differences of metals, their makeup and uses.

PO 5: Differentiate the differences of metals, their makeup and uses.	I	II	III	IV
Describes the differences between metals and their makeup.	Can't differentiate the differences between metals and their makeup.	Describes some differences of metals and their makeup with instructor assistance.	Describes the differences of metals and their makeup with little instructor assistance.	Describes the differences of metals and their makeup with no instructor assistance.
Demonstrates the ability to specify how to use certain metals in different applications.	Can't specify how to use certain metals in different applications.	Specifies some metals and how to use them in different applications with instructor assistance	Specifies metals and how to use them in different applications with little instructor assistance.	Specifies metals and how to use them in different applications with no instructor assistance.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
WELD 265	Welding Fabrication	1	0	0	1	no

		I	II	III	IV	Total # of Students
WELD 265	#					0
	%					

Assessment Results

WELD 175 was where the program outcome five's data was drawn from. This course was deactivated in the spring of 24.

Analysis

N/A

Use of Results for Improvement

With updating the SLO reports and course mapping we are reassessing the need for outcome five with the elimination of WELD 175. If the outcome is retained, we will draw data from WELD 265 and update course mapping.

What is the proposed timeline for the changes outlined above?

The need for the outcome will be evaluated in spring or summer of 25. Revised mapping will take effect fall of 26.

Program Outcome #6

Create designs and program various CNC equipment for use in fabrication.

PO 6 Create designs and program various CNC equipment for use in fabrication.	I	II	III	IV
Create designs and program various CNC equipment for use in fabrication.	Can't design and program CNC equipment for use in fabrication.	Demonstrates ability to design and program some CNC equipment for use in fabrication with instructor assistance.	Demonstrates ability to design and program CNC equipment for use in fabrication with little instructor assistance.	Demonstrates ability to design and program CNC equipment for use in fabrication with no instructor assistance.

Course Number	Course Name	Total Sections Utilized	Total Students Scored	Face to Face (F2F) Sections and Students	Number of FT and PT faculty Involved	Were all sections of this course involved?
CIVL 125	Computer Aided Design and CNC Applications	1	0	0	1	no

		I	II	III	IV	Total # of Students
CIVL 125	#					0
	%					

Assessment Results

In CIVIL 125 Computer Aided Design and CNC Applications students are evaluated on their ability to design a project on Auto CAD and programing that project into a CNC cut file and then demonstrating how to setup and cut their own program.

Analysis

The class was added to the program spring 24 and there were no students enrolled in the course.

Use of Results for Improvement

We are confident this is the best course to measure this outcome because this is the only course that focuses solely on this outcome. Aspects of this outcome are further refined in other courses but not seen in the full scope necessary for assessment.

What is the proposed timeline for the changes outlined above?

Data is being recorded as of spring of 25.

Additional Summary Notes

Anomalies in the results that were noticed:

With the limited data that we have and the first year of our program outcome revisions we are currently collecting data to close the gaps in our results.

Were there any patterns in the data observed?

Because of the lack of data we could not identify a pattern.

Addendum

Program Name: Welding Technology

- (1) Describe any changes (Curriculum, QM, modality, textbook, learning resources, etc.) made to your program in any previous year(s) that may have caused the (positive or negative) outcomes results in the 2018-19 SLO report. (Use as many pages as necessary to describe.)

The previous welding instructor resigned, and a new instructor began in fall 2023. This made a huge impact on results of the SLO reports with the lack of available data. Assessment data is currently being collected for the next SLO report for the 24/25 year. This is also the first year with revised outcomes and course mapping for the reports.

- (2) Explain how the data points align and impact the student learning outcomes or program outputs for each of the changes listed above in section (1.). (*Output data do not directly and specifically measure changes in student learning. Output data are the indirect results of program activities and are measured by enrollment, retention rate, graduation data, and external exam pass rates, etc.*)

Along with the personnel and curriculum changes made, there was a drop in enrollment, especially in second year courses which are the most important for program assessment. Currently enrollment is up, and data is now being collected for next year's SLO report.