Academic Program Assessment Report

Assessment is a term commonly used to encompass the process of gathering and using evidence to guide improvements.

SACSCOC requires that an institution "<u>identifies</u> expected outcomes, <u>assesses</u> the extent to which it achieves these outcomes, and <u>provides evidence of seeking improvement</u> based on analysis of the results".

Be sure to SAVE your progress as you work!

Academic Program Cybersecurity, B.S. Submission Year 2022-2023

Assessment Coordinator Name Dr. Elbasher Elmahdi Enter Assessment Coordinator Email eelmahdi@lander.edu

Program Goal

Goal

Goal 1

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate an understanding of the fundamental concepts, principles, and current trends in the cybersecurity discipline.

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add? Student Learning Outcome

Enter Outcome

The percentage of portfolio evaluations receiving scores of 4.0 or above for the design principles indicator of the CIS 449 portfolio rubric.

***(Total portfolio evaluations=Number of portfolios X Number of faculty members evaluating the portfolios, e.g. 3 portfolios evaluated by 4 faculty members will be counted as 12 portfolio evaluations. N/A responses are discarded.)

Timeframe for this Outcome

N/A

Performance Target for "Met"

80% or more portfolio evaluations received a score of 3.5 or above for the design principles indicator of the CIS 449 portfolio rubric.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% portfolio evaluations received a score of 3.5 or above for the design principles indicator of the CIS 449 portfolio rubric

Performance Target for "Not Met"

Fewer than 70% portfolio evaluations received a score of 3.5 or above for the design principles indicator of the CIS 449 portfolio rubric

Assessment Measure Used CIS 449 research project portfolio Frequency of Assessment Yearly

Data Collected for this Timeframe (Results) N/A

Score (Met=3, Partially Met=2, Not Met=1)

Comments/Narrative

This course has not been taught yet but when faculty offer this course, will develop a rubric for the CIS 449 portfolio assessment. This rubric will be used to score different aspects of CIS 449 portfolios submitted by students.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 2

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to identify and use required cyber defense tools, methods, and components needed to evaluate a given scenario. Faculty will identify practical assignments and a small project in CIS 343 and CIS 344, and appropriate weights will be assigned to each identified component. The average of scores for all identified components will then be computed and used to measure performance for this criterion.

Timeframe for this Outcome

Academic Year 2021- 2022

Performance Target for "Met"

80% or more students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% of students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Not Met"

Fewer than 70% students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Assessment Measure Used

Designated labs in CIS 343 and CIS 344

Frequency of Assessment Yearly

Data Collected for this Tir	neframe (Results)
78.26% of designated labs	(10/13 and 8/10).

Score (Met=3, Partially Met=2, Not Met=1) 2

Comments/Narrative

Data collected and analyzed is based on the statistics reports of the previous academic year only. Cybersecurity faculty are working on identifying a small project in CIS 343 and CIS 344 that will be used to improve the performance of this outcome.

Hopefully, performance target of this goal will be improved by assigning the course project and teaching the course CIS 499.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments

78.26% of students score an average of 90% and more in CIS 343 and CIS 344's designated labs and the remaining 21.7 % of students score an average less than 90% but still equal or greater than 80% i as shown by combining CIS 343 and CIS 344 Statistics reports.

Changes Made/Proposed Related to Goal

A small change in the performance targets measures.

Upload Rubrics/Other Files

Statistics Report of all practical assignments in CIS 343 - Spring 2022.pdf

Statistics Report of all practical assignments in CIS 344 - Fall 2021.pdf

Goal 2

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate an understanding of the federal, state, and local cyber defense laws and partners/structures, and ethics.

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to responsibly handle compromised data as it pertains to legal, ethical, and agency auditing. Students' numeric grades earned from two of the designated labs in CIS 343 will be used to measure this outcome. If more than two labs are used, then the average of all identified components will be used to measure the performance of this outcome.

Timeframe for this Outcome

Academic 2021 - 2022

Performance Target for "Met"

80% or more students score 80% or higher in CIS 343 designated labs related to evidence handling.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or higher in CIS 343 designated labs related to

evidence handling.

Performance Target for "Not Met"

Fewer than 70% students score 80% or higher in CIS 343 designated labs related to evidence handling.

Not Met=1)

Assessment Measure Used	Frequency of Assessment
Two designated labs in CIS 343	Yearly
Data Collected for this Timeframe (Results)	Score (Met=3, Partially Met=2, I
90% of students score 80% or higher.	3

Comments/Narrative

Cybersecurity faculty are working on identifying more CIS-343 labs that will be used to measure this outcome.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 2

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will show an understanding of the laws that provide US entities the authority to perform cyber operations. Students' numeric grades obtained in assigned CIS 243 work will be used to measure this outcome.

Timeframe for this Outcome

Academic Year

Performance Target for "Met"

80% or more students score 80% or above in designated assignments in CIS 243.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in designated assignments in CIS 243.

Performance Target for "Not Met"

Fewer than 70% students score 80% or above in designated assignments in CIS 243.

Assessment Measure Used	
Designated assignments in CIS 243	

Frequency of Assessment Yearly

Data Collected for this Timeframe (Results) 83.3% of students score 80% and more

Score (Met=3, Partially Met=2, Not Met=1) 3

Comments/Narrative

Cybersecurity faculty are working on identifying a project in CIS 343 requirements that will be added to measure this outcome.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments

Outcomes of this goal show a good performance.

Changes Made/Proposed Related to Goal N/A

Upload Rubrics/Other Files

Total Statistics Report of lab assignments 3 plus 4 of CIS 344 - Fall 2021.pdf

Statistics Report of all practical assignments in CIS 243 - Fall 2021.pdf

Goal 3

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate an understanding of the fundamental concepts, technologies, components, and issues associated with components of modern computing environments.

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will understand the common terms and technologies used in the field of information systems and cybersecurity. Students' numeric grades earned in designated CIS 243 assignments will be used to measure this outcome.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score 80% or above in designated CIS 243 exams or quizzes.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in CIS 243 exams or quizzes.

Performance Target for "Not Met"

Fewer than 70% students score 80% or above in CIS 243 exams or quizzes.

Assessment Measure Used	Frequency of Assessment
Exams (Three Exams) in CIS 243	Yearly
Data Collected for this Timeframe (Results)	Score (Met=3, Partially Met=2, Not Met=1)
83.3% (10/12).	3

Comments/Narrative

Faculty are working on developing a small project to measure this outcome effectively.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 2

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of

performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to design, deploy, and secure one or more computer network(s). Students numeric grades in a dedicated CIS 140 lab will be used to measure this outcome.

Timeframe for this Outcome Academic Year 2021 - 2022

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score 80% or above in designated CIS 140 lab.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in designated CIS 140 lab.

Performance Target for "Not Met"

Fewer than 70% students score 80% or above in designated CIS 140 lab.

Assessment Measure Used	Frequency of Assessment
Designated lab in CIS 140	Yearly
Data Collected for this Timeframe (Results) 65% (13 / 20).	Score (Met=3, Partially Met=2, Not Met=1) 1

Comments/Narrative

Faculty will identify more labs that can effectively measure this outcome and then they will be used as a tool to measure this outcome performance.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 3

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to use, manage, and secure multiple operating systems. Students' final numeric grades in CIS 260 course will be used to measure this outcome.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students obtained a final cumulative score of 80% in CIS 260 course.

Performance Target for "Partially Met"

Fewer than 80% or but at least 70% students obtained a final cumulative score of 80% in CIS 260 course.

Frequency of Assessment

Score (Met=3, Partially Met=2, Not Met=1)

Performance Target for "Not Met"

Fewer than 70% students obtained a final cumulative score of 80% in CIS 260 course.

Assessment Measure Used

Students' final numeric cumulative score in CIS 260

Data Collected for this Timeframe (Results)

The average is 75% of students (12/16)

Comments/Narrative

As the course covers Windows and Linux operating systems and multiple topics related to each, final numeric grade will be an effective tool for measuring this outcome's performance.

2

Yearly

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 4

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add? Student Learning Outcome

Enter Outcome

Students will be able to capture and analyze data-in-motion and data-at-rest to diagnose malicious activities. Faculty will identify labs and/or assignments in CIS 343 and CIS 344 and appropriate weights will be assigned to each identified component. An average of scores for all identified components will then be computed and used to measure performance for these criteria.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% of students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Not Met"

Fewer than 70% students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Assessment Measure Used

Designated labs in CIS 343 and CIS 344

Frequency of Assessment Yearly

Score (Met=3, Partially Met=2, Not Met=1)

Data Collected for this Timeframe (Results)

The average 78.26% (10/13 and 8/10).

Comments/Narrative

Cybersecurity faculty is working on identifying a portion of the final exam in CIS 343 as a practical exam that will be used to measure this outcome effectively.

2

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments

Faculty will develop projects and more labs to assess these outcomes to be fully met.

Changes Made/Proposed Related to Goal

N/A

Upload Rubrics/Other Files

Statistics Report of total Exams CIS 243 - Fall 2021.pdf

Statistics Report of CIS140 Lab.PNG

Statistics Report of final numeric grades in CIS 260.PNG

Statistics Report of all practical assignments in CIS 343 - Spring 2022.pdf

Statistics Report of all practical assignments in CIS 344 - Fall 2021.pdf

Goal 4

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate the knowledge to develop and maintain solutions for preserving confidentiality, integrity, and availability of information systems.

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will understand the importance of cryptography. Students' numeric grades for a designated assignment or quiz in CIS 345 will be used to measure this outcome.

Timeframe for this Outcome N/A

Performance Target for "Met" 80% or more students score 80% or above in designated CIS 345 assignment

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in designated CIS 345 assignment

Performance Target for "Not Met"

Fewer than 70% of students score 80% or above in designated CIS 345 assignment

Assessment Measure Used

Frequency of Assessment

Designated assignment in CIS 345

Yearly

Score (Met=3, Partially Met=2, Not Met=1)

Data Collected for this Timeframe (Results) N/A

Comments/Narrative

This course has not been taught yet but when faculty offer this course, assignments will be developed while keeping assessment needs in mind.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 2

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to deploy solutions to detect malicious activity. Faculty will identify labs and/or assignments in CIS 243 and CIS 344 and appropriate weighting will be assigned to each identified component. The average of scores for all identified components will then be computed and used to measure performance for this criterion.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% of students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Performance Target for "Not Met"

Fewer than 70% students score at least an average of 90% in designated labs and projects in CIS 343 and CIS 344.

Assessment Measure Used

Frequency of Assessment

Designated labs in CIS 243 and CIS 344

Yearly

Data Collected for this Timeframe (Results)

77.27% (7/12 and 10/10) in designated labs

Comments/Narrative

Cybersecurity faculty are working on identifying small projects in CIS 243 and CIS 343 that will be used to measure this outcome.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Outcome 3

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to identify an attack(s) in progress and/or in the past and defend against them. Faculty will identify labs and/or assignments in CIS 243, CIS 343 and CIS 344 and appropriate weights will be assigned to each identified component. The average of scores for all identified components will then be computed and will be used to measure performance for this criterion.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score at least a weighted average of 80% in CIS 243, CIS 343 and CIS 344's designated labs.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score at least a weighted average of 80% in CIS 243, CIS 343 and CIS 344's designated labs.

Performance Target for "Not Met"

Fewer than 70% students score at least a weighted average of 80% in CIS 243, CIS 343 and CIS 344's designated labs.

Assessment Measure Used

Frequency of Assessment

Score (Met=3, Partially Met=2, Not Met=1) 2

Designated labs in CIS 243, CIS 343 and CIS 344 Yearly

Data Collected for this Timeframe (Results)

85.71% in designated labs of CIS 243, CIS 243 and CIS 344

Comments/Narrative

Cybersecurity faculty are working on identifying small projects in CIS 243, CIS 343 and CIS 344 that will also be used to measure this outcome.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments N/A

Changes Made/Proposed Related to Goal N/A

Upload Rubrics/Other Files

Statistics Report of all practical assignments in CIS 243 - Fall 2021.pdf

Statistics Report of all practical assignments in CIS 344 - Fall 2021.pdf

Statistics Report of all practical assignments in CIS 343 - Spring 2022.pdf

Goal 5

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate an ability to assess risk management practices and policies for an organization

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop Student Learning Outcomes, which describe knowledge,

Score (Met=3, Partially Met=2, Not Met=1) 3 skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to develop and deploy plans for threat prevention, risk assessment, and disaster recovery. Numeric grades assigned to CIS 346 final project will be used to assess this outcome's performance.

Timeframe for this Outcome

N/A

Performance Target for "Met"

80% or more students score 80% or above in CIS 346 final project assessment.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in CIS 346 final project assessment.

Performance Target for "Not Met"

Fewer than 70% students score 80% or above in CIS 346 final project assessment.

Assessment Measure Used	Frequency of Assessment
CIS 346 Final project	Yearly
Data Collected for this Timeframe (Results)	Score (Met=3, Partially Met=2, Not Met=1)

Comments/Narrative

This course is just started running this year 2022 - 2023. Faculty will make sure to develop CIS 346 final project assignment to include elements needed to measure this outcome effectively.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments N/A

Changes Made/Proposed Related to Goal N/A

Upload Rubrics/Other Files

Goal 6

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal

Students who graduate with a B.S. degree in Cybersecurity will demonstrate the ability to communicate effectively and appropriately orally and in writing.

Pillar of Success Supported

Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will demonstrate an ability to communicate with technical and non-technical audiences effectively and appropriately.

The percentage of portfolio evaluations (for the last three years) receiving scores of 4.0 or above for the effective communication indicator of the CIS 449 portfolio rubric.

***(Total portfolio evaluations=Number of portfolios X Number of faculty members evaluating the portfolios, e.g. 3 portfolios evaluated by 4 faculty members will be counted as 12 portfolio evaluations. N/A responses are discarded.

Timeframe for this Outcome N/A

Performance Target for "Met"

80% or more portfolio evaluations (for the last three years) received a score of 3.5 or above for the effective communication indicator of the CIS 449 portfolio rubric.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% portfolio evaluations (for the last three years) received a score of 3.5 or above for the effective communication indicator of the CIS 449 portfolio rubric.

Performance Target for "Not Met"

Fewer than 70% portfolio evaluations (for the last three years) received a score of 3.5 or above for the effective communication indicator of the CIS 449 portfolio rubric.

Assessment Measure Used

CIS 449 final project presentation

Frequency of Assessment Yearly

Data Collected for this Timeframe (Results) N/A Score (Met=3, Partially Met=2, Not Met=1)

Comments/Narrative

This course has not been taught yet but when faculty offer this course, a rubric will be developed for the CIS 449 portfolio assessment. This rubric will be used to score different aspects of CIS 449 portfolios submitted by students.

Resources Needed to Meet/Sustain Results

N/A

Explanation of How Resources Will Be Used

Outcome 2

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will demonstrate an ability to write a report detailing their investigation process on any incident. A written record of the entire investigation must be clear, concise, and accurate.

Timeframe for this Outcome

Academic Year 2021 - 2022

Performance Target for "Met"

80% or more students score 80% or above in CIS 343 final practical exam.

Performance Target for "Partially Met"

Fewer than 80% but at least 70% students score 80% or above in CIS 343 final practical exam.CIS

Performance Target for "Not Met"

Fewer than 70% students score 80% or above in CIS 343 final practical exam.

Assessment Measure Used		
The practical portion of final exam CIS 343		

Frequency of Assessment Yearly

Data Collected for this Timeframe (Results) Students average 92.3% of the final exam Score (Met=3, Partially Met=2, Not Met=1) 3

Comments/Narrative

A portion of the final exam in CIS 343 is used to measure this outcome effectively.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments N/A

Changes Made/Proposed Related to Goal N/A

Upload Rubrics/Other Files Statistics Report of practical final exam CIS-343.pdf

Goal 7

Program Goals are broad and overarching statements about the skills, knowledge, and dispositions students are expected to gain by the end of their course of study (big picture). They support the Institution's Mission/Goals.

Program Goal Students who graduate with a B.S. degree in Cybersecurity will demonstrate the ability to self-learn.

Pillar of Success Supported Graduates Who Are Gainfully Employed or Admitted to Graduate School

Outcomes

Outcome 1

Outcomes are specific, measurable statements that reflect the broader goals.

Academic Programs are required to develop **Student Learning Outcomes**, which describe knowledge, skills, and values that students are expected to gain as a result of their educational experiences.

Academic Programs may also develop **Operational Outcomes**, which describe the level of performance of an operational aspect of a program or office (ex. graduation rates, retention, employment data).

Most goals have at least two outcomes measured.

What type of Outcome would you like to add?

Student Learning Outcome

Enter Outcome

Students will be able to complete a small-scale cybersecurity research project. The percentage of portfolio evaluations (for the last three years) receiving scores of 4.0 or above for the self-learning and research indicator of the CIS 449 portfolio rubric.

***(Total portfolio evaluations=Number of portfolios X Number of faculty members evaluating the portfolios, e.g. 3 portfolios evaluated by 4 faculty members will be counted as 12 portfolio evaluations. N/A responses are discarded.)

Timeframe for this Outcome

N/A

Performance Target for "Met"

80% or more portfolio evaluations (for the last three years) received a score of 3.5 or above for the self-learning and research indicator of the CIS 449 portfolio rubric

Performance Target for "Partially Met"

Fewer than 80% but at least 70% portfolio evaluations (for the last three years) received a score of 3.5 or above for the self-learning and research indicator of the CIS 449 portfolio rubric

Performance Target for "Not Met"

Fewer than 70% portfolio evaluations (for the last three years) received a score of 3.5 or above for the self-learning and research indicator of the CIS 449 portfolio rubric

Assessment Measure Used

Faculty evaluation of CIS 449 research project portfolio

Frequency of Assessment Yearly

Data Collected for this Timeframe (Results) N/A

Score (Met=3, Partially Met=2, Not Met=1)

Comments/Narrative

This course has not been taught yet but when faculty offer this course, will develop a rubric for the CIS 449 portfolio assessment. This rubric will be used to score different aspects of CIS 449 portfolios submitted by students.

Resources Needed to Meet/Sustain Results

Explanation of How Resources Will Be Used

Goal Summary

Goal Summary/Comments N/A

Changes Made/Proposed Related to Goal

N/A

Upload Rubrics/Other Files

Thank you for completing your assessment report. Your report will be sent to your College Dean for their review and approval after you hit "Submit" below. Please enter their email address below.

Dean's Email Address dslimmer@lander.edu

Thank you for reviewing and approving this report. The approval and a copy of the report will be emailed to you and the Assessment Coordinator.