Assessment Cycle 2022 – 2023

Computer Information Systems

Division: School of Business, College of Business and Technology Prepared

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Northwestern Mission. Northwestern State University is a responsive, student-oriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

College of Business and Technology Mission. The College of Business and Technology is dedicated to providing a high quality – market responsive business and technology education, preparing our diverse student population for successful careers and enriched lives in the public, private and nonprofit sectors, and enhancing our students' academic experiences through our research and scholarly activities.

School of Business Mission. The mission of the School of Business is to provideour diverse student population with innovative skills in business and technology to prepare them for successful careers and responsible citizenship roles to have a positive societal impact in the world of business. (Adopted 2017-2018 – mission wording was revised to include "our diverse population"; Adopted 2020-2021 – missionwording was revised to reflect societal impact)

As such, NSU's School of Business is committed to …

Providing students with a business education. This means that we strive to provide students with opportunities to become effective communicators, critical thinkers, develop knowledge across the business disciplines, and global perspective.

Preparing them for successful careers and citizenship roles. This means that we provide education experience and opportunities.

…In the world of Business. This implies developing a global perspective that involves managing activities that foster the transfer of goods and services in organizations of all types wherever found.

Computer Information Systems Program Mission Statement: The mission of the BS in Computer Information Systems in the School of Business at Northwestern State is to prepare our diverse student populations for careers as information

systems and technology professionals in the public, private and nonprofit sectors, and/or for advancement into graduate programs. This purpose will be met by providing quality online and face-to-face business and technology instruction and academic support with high academic standards, superior teaching, quality research, significant service, and effective use of technology for the citizens of our region. (Approved by CIS faculty on 4/5/2017, 4/13/2018).

Purpose: To prepare students for careers as business professionals in the public, private and nonprofit sectors, and/or for advancement into graduate programs.

Methodology: The assessment process for the School of Business includes:

(1) The School of Business and Technology alternates the assessment of its SLO yearly. SLO's 1-4, which are shared among the programs is assessed during one assessment cycle. SLO 5, which is unique to each program is assessed during another assessment cycle. This approach allows for a complete program assessment every two years.

(2) A variety of assessment tools (quantitative, qualitative, direct, and indirect) are used to collect data for analysis for each of the five Student Learning Outcomes (SLOs).

(3) Data is collected and returned to the SLO Chairs.

(4) Summary results are analyzed to determine if students have achieved or "met" the measurable outcomes. When necessary, proposed action steps are created by each SLO chairman in collaboration with the SLO committee members, faculty teaching core courses, and the program coordinator.

(5) Following discussion and review by appropriate faculty, if needed, proposed recommended action steps, and recommended changes are implemented by the faculty responsible for teaching the courses tied to the SLO.

(6) Individual meetings are held with faculty and staff as required (show cause).

(7) In consultation with the staff and senior leadership, proposed changes to measurable outcomes, assessment tools for the next assessment period and, where needed, service changes will be recommended.

(8) These proposed recommended action steps and recommended changes are implemented by the faculty responsible for teaching the courses tied to the SLO.

Student Learning Outcomes (SLOs):

Note: For SLO 1 to SLO 4, the School of Business measures it every other year so in AC 2022-2023, SLOs 1 to SLO 4 were measured. The SLO 1 to SLO 4 results and analysis in this report are based on the AC 2022-2023 results. SLO 5 was measured during AC 2021-2022. The SLO 5 results and analysis in this report are based on the AC 2021-2022 results.

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SLO 1. <u>Effective Communicators</u>. Students should be able to:

- <u>Objective 1a</u>: Produce professional quality business documents;
- <u>Objective 1b</u>: Deliver professional quality oral presentations; and
- <u>Objective 1c</u>: Demonstrate communication skills in team settings.

Course Map (Tied to course syllabus objectives):

BUAD 2200   Business Reports and Communication (Foundational Course)
CIS 4600   Advanced Systems Development (Capstone Course)
MKTG 3230   Principles of Marketing (Foundational Course)

Measure 1a.1 (Direct – Exam; BUAD 2200 Objective Measures)

Details/Description: In BUAD 2200, a pre-test that includes an objective exam and a written email letter was developed to provide a comprehensive overview of the business communication requirements and contained such topics as: (1) Laying communication foundations, (2) Using the writing process, (3) Corresponding at work, (4) Reporting workplace data, and (5) Developing speaking and technology skills. This same test is given as a post-test at the end of the semester. The results of the post-test are provided.

Acceptable Target: At least 75% of the students must earn 70% or better on the posttest.

Ideal Target: At least 85% of the students must earn 70% or better on the post-test.

Implementation Plan (timeline): This measurement is completed each semester in BUAD 2200. The data would only be reported every other academic year.

Key/Responsible Personnel: The School of Business faculty teaching BUAD 2200 / CIS 1015 are responsible for completing this measurement.

Finding: The acceptable target was **<u>not</u>** met.

Analysis: The table below shows the results for the 2020-2021 and 2022-2023 assessment cycles for Measure 1a.1. The acceptable target was <u>not met</u> in AC 2020-2021 and was <u>not met</u> in AC 2022-2023. While the table shows a 4% drop in the percentage of students earning a 70% or better on the post-test, this comparison is not a valid comparison as the 2020-2021 numbers included all students in BUAD2200 while the 2022-2023 numbers included only the CIS students.

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Table 1: AC 2020-2021 through AC 2022-2023 Results

Measure 1a.1				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021 (All Students)	97	75%	85%	66%
2022-2023 (CIS Only)	42	75%	85%	62%
Percentages indicate the percent of students scoring 70% or better on the measure.				

*SLOs 1-4 are measured every other assessment cycle.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **not** met, and the ideal target was **not** met. 195 students were given the BUAD 2200 objective measure(post-test). Of these students, 66% scored 70% or better on the post-test. The number of students not participating in the pre-test, post-test exams was larger in AC 2020-2021 than in past semesters. A total of 237 students were graded for the BUAD2200 courses. Eighty-two percent (n=195) of the students took the final exam during AC 2020-2021; eighteen percent (n=42) did not complete the final exam/post-test.

Based on the analysis of the AC 2020-2021 results, the faculty made the following changes in AC 2021-2022 and AC 2022-2023 to drive the cycle of improvement. The instructors of the course attempted to lower the number of students not participatingin the pre-test, post-test exams as the 18% non-participation rate was higher than the 10% range from past years. The instructors delivered information to the students at the beginning of each semester about the expectations for the students. Students were asked to indicate their understanding of the requirements for the course.

The instructors of the Business Communications course continued to meet regularly to examine scoring and grading issues and to review any issues with attendance and participation. Examples of short instructional videos were added to the course. Short chapter quizzes were offered after each chapter.

The faculty provided an additional comprehensive overview of the business communication requirements in both the face-to-face and online courses. To continue the strengthening of the course topics and assessment, the instructorscollaborated to insure course consistency. Also, all students were directed to the Bossier Parish Community College-Open Campus (free online non-credit courses) to aid instruction in the grammar mechanics area.

Using data from AC 2020-2021, adjustments were made for AC 2021-2022 and AC 2022-2023. Faculty members teaching BUAD 2200 continued to utilize a variety of pedagogical methods to assist students. Best practices included professors continuing to embed model examples of variousbusiness report documents into the course and voice-narrated videos. These videos provided step by step project/assignment directions for use by students.

These changes were an attempt to improve the student's ability to understand the

communication process and therefore, become a better communicator.

As a result of these changes, in AC 2022-2023, the acceptable target was **not** met and the ideal target was **not** met. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students in BUAD2200 while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC22-23, 42 students were given the BUAD 2200 objective measure(post-test). Of these students, 62% scored 70% or better on the post-test.

Decision:

In 2022-2023, the target was not met. Based on the analysis of the AC 2022-2023 results, corrective action will be taken in AC 2023-2024. The faculty will implement the following changes in 2023-2024 to drive the cycle of improvement:

A larger discussion of reimagining the student learning outcomes and the Computer Information Systems degree plan occurred in the AC 2022-2023 cycle. Additionally, a statewide discussion regarding transferability amongst all four-year and two-year institutions also occurred in the AC 2022-2023 cycle. As part of these discussions, the faculty planned to likely revise the curriculum to include COMM1010 – Oral Communication in addition to BUAD2200 – Business Reports and Communication.

The results in this measure as well as the other Student Learning Outcome 1 measurements reinforces the need to strengthen the communication skills of the CIS students.

In August 2023, the faculty will officially vote on this change. If approved, the change will then go to the university Curriculum Review Committee for consideration. If approved by that committee and signed off by the provost and president, the change would then become effective in the AC 24-25. While this change will not impact the results in AC 23-24, it could potentially start to affect the results in AC 24-25.

Additionally, the non-participation rate for the BUAD2200 measurement remained at approximately 18 to 19%. The instructors of the course will continue to attempt to lower the number of students not participating in the post-test exams.

Finally, CIS students will have taken few School of Business classes before having taken BUAD2200 which is generally taken in their sophomore year. However, most CIS students will have taken CIS 1015 – Introduction to Computer Information Systems. In that class, CIS students must complete an end-of-semester report giving feedback on what they have learned about the CIS degree program, career prospects, and their tentative decision on which concentration to pursue. The CIS faculty will work with the BUAD2200 faculty to develop a rubric that helps guide the students on that report and

gives them feedback that starts to help them align with the expectations of the BUAD2200 faculty.

These changes will improve the students' ability to produce professional quality business documents thereby continuing to push the cycle of improvement forward.

Measure 1a.2 (Direct – Student Artifact; MGT 4300/CIS 4600 Written Document)

Details/Description: In MGT 4300/CIS 4600, students are required to create a business letter addressing a business problem and deliver the letter as an attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This measure should be completed each semester as part of the School of Business Common Body Knowledge Exam (SoBUSKE).

Key/Responsible Personnel: The School of Business faculty teaching MGT 4300 / CIS 4600 are responsible for completing this measurement.

Finding: The acceptable target and the ideal target were **met**.

Analysis: The table below shows the results for the 2020-2021 and 2022-2023 assessment cycles for Measure 1a.2. The acceptable target was met in AC 2020-2021 and was met in AC 2022-2023. The ideal target was **not** met in AC 2020-2021 but was **met** in 2022-2023. While the table shows a 20% increase in the percentage of students earning a 70% or better on the final business document, this comparison is not a valid comparison as the 2020-2021 numbers included all students writing the letter while the 2022-2023 numbers included only the CIS students writing the letter.

Table 2: AC 2020-2021 through AC 2022-2023 Results

Measure 1a.2				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021 (All Students)	15	75%	85%	80%
2022-2023 (CIS Only)	3	75%	85%	100%
Percentages indicate the percent of students scoring 70% or better on the measure.				

*SLOs 1-4 are measured every other assessment cycle.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the target was met. This measurement was taken as part of the School of Business Common Body Knowledge Exam (SoBUSKE) at the end of the semester.

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Thisexam does not count toward the student's final grade in the courses. During the Fall 2020 semester, only 11 students from the MGT 4300 course returned the letter assessment asdirected on the exam. Of those 11, 9 scored a 75% or above on the measurement.

During the Spring 2021 semester, 4 students from the CIS 4600 section completed the letter assessment as requested on the exam. Three of the four students that submitted the letter assessment scored over the acceptable 75% target (75% met the target). Finally, combined results for the full AC 20-21 do show a positive outcome. When both semestersare combined, the target score is met. Fall 2020 and Spring 2021 results yield the following: a total of 15 students (n=15) submitted the letter assessment. Out of those 15 students, 12 scored 75% of higher for a Fall 20 – Spring 21 total of 80% of the students meeting the acceptable target.

Based on the analysis of the AC 2020-2021 results, the faculty teaching the MGT 4300 and CIS 4600 course utilized peer learning and peer assessments to allow students to recognize different quality levels of writing in other students in such a way that it also helps them to improve their own writing. The faculty members also continued to urge students in their classes to submit the letter.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who submitted a letter while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 3 students submitted the business letter. Of these students, 100% scored 70% or better on the post-test.

Decision:

In AC 2022-2023 the acceptable target and ideal target were **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

The performance on this measure was outstanding for the AC 2022-2023. However, the participation rate was poor which limits the applicability of the results. The CIS 4600 – Advanced Systems Development class had 27 students enrolled but only 3 students completed the letter.

Thus, the faculty member teaching the CIS 4600 class will strengthen their efforts to ensure students complete this task on the SoBUSKE. The faculty member will reiterate the importance of measuring this knowledge to the students in the CIS 4600 class.

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These changes will improve the faculty's ability to truly judge and improve the students' ability to produce professional quality business documents thereby continuing to push the cycle of improvement forward.

Measure 1a.3 (Direct – Student Artifact; UNIV1000 Written Document)

Details/Description: In UNIV1000 (The University Experience), students are required to create a business letter addressing a business problem and deliver the letter as an email attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This written document is part of the SoBUSKE and will be given each semester beginning in 2020-2021.

Key/Responsible Personnel: School of Business Faculty Teaching UNIV1000 School of Business Freshman Interest Group (FIG).

Findings: The target was not measured.

Analysis: The table below shows the results of the findings for 2020-2021 for Measure 1a.3.

Table 3: AC 2018-2019 and AC 2020-2021 Results

Measure 1a.3				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021	52	75%	85%	0%
Percentages indicate the percent of students scoring 70% or better on the measure.				

*SLOs 1-4 are measured every other assessment cycle.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the target was **not** met. Fifty-two students were enrolled in UNIV 1000 during the fall 2020 semester. These students were given the SoBUSKE exam; however, the instructor did not give thewritten letter assignment portion of the exam. Therefore, there was no data available forthis measure and the resulting statistic is 0% passing. This course was not offered during the Spring semester. The acceptable and the ideal targets were not measurable becausethe data was not captured for AC 2020-21.

Based on the analysis of the AC 2020-2021 results as well as previous year results, the School of Business faculty determined that this measurement was not giving any useful information. The School of Business faculty determined this measurement would not be included in UNIV1000 any longer.

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As a result of these changes, in AC 2022-2023, the target was not measured.

Decision:

In AC 2022-2023, the target was not measured. Based on the previous analysis of past year's results, the faculty will discontinue the use of this measurement going forward.

Measure 1a.4 (Direct – Student Artifact; BUAD 2200 Written Document)

Details/Description: In BUAD 2200 students are required to create a business letter addressing a business problem and deliver the letter as an email attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This assignment is given in BUAD 2200 each semester as part of the final exam. The rubric will be developed and implemented for AC 2023-2024. The faculty will vote to incorporate COMM1010 into the curriculum in the 2023-2024 assessment cycle

Key/Responsible Personnel: The School of Business faculty teaching BUAD 2200 / CIS 1015 are responsible for completing this measurement.

Findings: The acceptable target was **not** met. The Ideal target was **not** met.

Analysis: The table below shows the results for the 2020-2021 and 2022-2023 assessment cycles for Measure 1.a.4. The acceptable target was **not** met in AC 2020-2021 and was **not** met in AC 2022-2023. The ideal target was **not** met in AC 2020-2021 and was **not** met in AC 2022-2023. While the table shows a 5% increase in the percentage of students earning a 70% or better on the business letter, this comparison is not a valid comparison as the 2020-2021 numbers included all students writing the letter while the 2022-2023 numbers included only the CIS students writing the letter.

Table 4: AC 2020-2021 through AC 2022-2023 Results

Measure 1a.4				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021 (All Students)	180	75%	85%	68%
2022-2023 (CIS Only)	41	75%	85%	73%
Percentages indicate the percent of students scoring 70% or better on the measure.				

*SLOs 1-4 are measured every other assessment cycle.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO

would only be reported every two years.

In AC 2020-2021, 180 of 237 enrolled students (76%) completed the BUAD 2200 written document measure during the BUAD 2200 (Business Reports and Communications) final exam. Twenty-four percent (n=57) of the enrolled students either did not take the final exam at all or chose not to complete the final letter assignment. It was found that only 68% of the students who completed the assessment (n=82), scored 70% or better on the written letter.

Based on the analysis of the AC 2020-2021 results, the BUAD2200 faculty delivered more information about writing sales letters. The rubric for the assignment was discussed more thoroughly with the students before the assignment and an additional writing assignment was added. The instructors provided more opportunities for students to have one-on-one feedback on preliminary written documents prior to the final written document assignment.

As a result of these changes, in AC 2022-2023, the acceptable target was **not** met and the ideal target was **not** met. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who submitted a letter while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 41 students submitted the business letter. Of these students, 73% scored 70% or better on the post-test.

Decision:

In 2022-2023, the targets were **not** met. Based on the analysis of the AC 2022-2023 results,corrective action will be taken in AC 2023-2024. The faculty will implement the following changes in 2023-2024 to drive the cycle of improvement:

As previously discussed in Measure 1a.1, the faculty will officially vote on incorporating COMM1010 into the curriculum in the 2023-2024 assessment cycle.

Additionally, the CIS faculty will work with the BUAD2200 faculty to develop a rubric that helps guide the students on the CIS 1015 report and gives them feedback that starts to help them align with the expectations of the BUAD2200 faculty.

These changes will improve the students' ability to produce professional quality business documents thereby continuing to push the cycle of improvement forward.

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Measure 1b (Direct – Student Artifact; BUAD 2200 Oral Presentation)

Details/Description: In BUAD 2200 (Business Reports and Communication), students are required to develop and deliver a 20-minute presentation about conducting business in a foreign country. This presentation is graded with a rubric shared with all students and the professors. Scores of all the raters are compared to a provided final grade.

Acceptable Target: On the final class presentation, a minimum of 90% of students will score at least acceptable (70%).

Ideal Target: On the final class presentation, a minimum of 95% of students will score at least acceptable (70)%.

Implementation Plan (timeline): This measurement is completed in BUAD 2200 each semester as part of the final exam. CIS 1015 students work in groups to give an oral presentation on their final report each semester. The rubric will be developed and implemented for AC 2023-2024. The faculty will vote to incorporate COMM1010 into the curriculum in the 2023-2024 assessment cycle.

Key/Responsible Personnel: The School of Business faculty teaching BUAD 2200 / CIS 1015 are responsible for completing this measurement.

Findings: The acceptable target was **not** met, and the ideal target was **not** met.

Analysis: The table below shows the results for the 2020-2021 and 2022-2023 assessment cycles for Measure 1.b. The acceptable target was **met** in AC 2020-2021 and was **not** met in AC 2022-2023. The ideal target was **not** met in AC 2020-2021 and was **not** met in AC 2022-2023. While the table shows a 5% decrease in the percentage of students earning a 70% or better on the final class presentation, this comparison is not a valid comparison as the 2020-2021 numbers included all students writing the letter while the 2022-2023 numbers included only the CIS students writing the letter.

Table 5: AC 2020-2021 through AC 2022-2023 Results

Measure 1b				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021 (All Students)	184	90%	95%	94%
2021-2022 (CIS Only)	34	90%	95%	89%
Percentages indicate the percent of students scoring 70% or better on the measure.				

*SLOs 1-4 are measured every other assessment cycle.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was met, and the ideal target was not met. 94% of the students (n=173) scored 70% or better on the final presentation. This rate was a slight (1%) decline over the results from AC 2018-2019. Unfortunately, 22% (n=64) of

the enrolled students either did not complete the course or chose not to participate in the presentation environment. Those students received a zero on the assignment but were removed from the data analysis.

Based on the analysis of the 2020-2021 results, the faculty made the following changes in AC 2021-2022 and AC 2022-2023. The BUAD2200 instructors delivered information to the students about the expectations of the students. Students were asked to indicate their understanding that the final presentation was a mandatory requirement for the course. The faculty utilized the steward mentoring program and used best practices such as embedding additional examples of various business presentation documents into the course and voice-narrated videos.

As a result of these changes, in AC 2022-2023, the acceptable target was **not** met and the ideal target was **not** met. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the oral presentation while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2022, 34 students completed the oral presentation. Of these students, 89% scored a 70% or higher.

Decision:

In AC 2022-2023, the target was **not** met. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

As previously discussed in two of the 1a measures, the faculty will officially vote on incorporating COMM1010 into the curriculum in the 2023-2024 assessment cycle. If approved at the university level, the COMM1010 – Oral Communication would be a required part of the curriculum for 2023-2024.

For the face-to-face CIS 1015 class, those students will work in groups to give an oral presentation on their final report. The CIS 1015 faculty will work with the BUAD2200 faculty to create a rubric that helps guide the students on the CIS 1015 oral presentation and gives them feedback that starts to help them align with the expectations of the BUAD2200 faculty.

These changes will improve the students' ability to deliver professional quality oral presentations thereby continuing to push the cycle of improvement forward.

Measure 1c (Direct – Student Artifact; MKTG 3230 Team Presentation)

Details/Description: In MKTG 3230, students are divided into small groups (3 to 4

students) and are required to develop a marketing plan for a new product. In addition to developing a written report, the groups are required to orally present their reports. The presentations were evaluated as Exemplary, Good, Satisfactory, or Unacceptable.

Acceptable Target: At least 75% of the groups will earn an Exemplary or Good score on at least three of the four areas of the grading rubric.

Ideal Target: At least 85% of the groups will earn an Exemplary or Good score on at least three of the four areas of the grading rubric.

Implementation Plan (timeline): This measurement is completed each semester in MKTG 3230.

Key/Responsible Personnel: School of Business Faculty teaching MKTG 3230 are responsible for this measurement.

Findings: The acceptable target was **met**, and the ideal target was **met**.

Analysis: The table below shows the results for the 2020-2021 and 2022-2023 assessment cycles for Measure 1.c. The acceptable target was **met** in AC 2020-2021 and was **met** in AC 2022-2023. The ideal target was **met** in AC 2020-2021 and was **met** in AC 2022-2023. While the table shows a 6% increase in the percentage of students earning an exemplary or good score on at least three of the four areas of the grading rubric, this comparison is not a valid comparison as the 2020-2021 numbers included all teams completing the marketing plan while the 2022-2023 numbers included only the CIS students completing the marketing plan.

Table 6: AC 2020-2021 and AC 2022-2023 Results

Measure 1c				
Academic Year*	n (# of student teams) or n (# of students)	Acceptable Target	Ideal Target	Actual Results**
2020-2021 (All teams)	16	75%	85%	94%
2022-2023 (CIS students)*	27	75%	85%	77%
2022-2023 (CIS students)**	21	75%	85%	100%
Percentages indicate the percentage of students scoring 70% or better on the measure. *Includes all students including those who did not participate in the group presentation **Only includes students who participated in the group presentation				

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. In Fall 2020, 10 out of 11 groups (90.9%) groups earned an Exemplary or Good score on at least three of the four areas of the grading rubric. In Spring 2021, 5 out of 5 groups (100%)

made groups earned anExemplary or Good score on at least three of the four areas of the grading rubric.

Overall, in AC 2020-2021, 15 out of 16 groups (93.75%) earned an Exemplary or Good score on at least three of the four areas of the grading rubric. The ideal target was **met**.

Based on the analysis of the 2020-2021 results, the faculty made the following changes in AC 2021-2022 and AC 2022-2023. The MKTG3230 instructor included more one-on-one attention to students through emails, phone calls, and video chats encouraging students to participate in the presentation. The instructor developed a series of example video presentations to allow students to view and critique a presentation in the context of a class discussion. The instructor also emphasized the need for students to practice several times before they presented.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all teams who completed the marketing plans while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 21 students participated in the group presentation. Of these students, 100% earned an Exemplary or Good score on at least three of the four areas of the grading rubric.

Decision:

In AC 2022-2023 the acceptable target and ideal target were **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

The performance on this measure was outstanding for the AC 2022-2023. However, the participation rate could be improved. Only 21 of 27 (78%) of the CIS students participated in the group presentation.

Thus, the faculty member teaching the MKTG3230 class will strengthen their efforts to ensure participation in the group presentation. The faculty member will utilize one-on-one contact to ensure students participate in the group presentation. Additionally, as students start taking COMM10110 and get to the MKTG3230 class, their oral presentation skillset will be enhanced and make them more likely to participate.

These changes will improve the faculty's ability to truly judge and improve the students' ability to demonstrate communication skills in team settings.

SLO 2. <u>Integration of Knowledge across Business Disciplines</u>. Students should be able to: Demonstrate understanding of key concepts and theories in various functional areas of business.

Course Map: Tied to course syllabus objectives.

BUAD 2120 Basic Business Statistics (Foundational Course)
CIS 4600   Advanced Systems Development (Capstone Course)
FIN 2150   Personal Finance (Foundational Course)
MGT 4300   Strategic Management and Policies (Capstone Course)
MKTG 3230 Principles of Marketing (Foundational Course)
UNIV 1000   The University Experience (Supporting Course)

A note on the School of Business Knowledge Exam (SoBUSKE):

Data for SLO2 measures 1a.2, 1a.3, 2.1, 2.2, 2.3, and 4.3 are usually gathered through the NSU School of Business Knowledge Exam (SoBUSKE). This exam was administered for over <u>ten years</u>. However, as part of our plan at the end of AC 2016-2017, the exam was only partially administered in AC 2017-2018. During the 2017-2018 academic cycle, an updated SoBUSKE was developed and implemented in Spring 2019. The results from the first official implementation of the test were in spring 2019.

Measure: 2.1. **(Direct – Exam; Partial School of Business Knowledge Exam)**

Details/Description: Portions of the School of Business Knowledge Exam (SoBUSKE) are given in the following classes: BUAD 2120 (Basic Business Statistics), FIN 2150 (Personal Finance), and MKTG 3230 (Principles of Marketing). These classes provide intermediate measurements for specific components of the School of Business Knowledge Exam.

Note: In accordance with the school of business' assessment plan, the SoBUSKE is given every other year. Therefore, testing data from AC 2021-2022 is typically the same data as from the 2020-2021 assessment cycle.

Acceptable Target: At least 75% of students will score higher than the ETS average in the knowledge area.

Ideal Target: At least 85% of students will score higher than the ETS average in the knowledge area.

Implementation Plan (timeline): These partial School of Business Knowledge Exams are given each semester the class is offered.

Key/Responsible Personnel: School of Business faculty teaching these courses are responsible for the measurement.

Assessment Cycle 2022 – 2023

Findings: Two of the three subject areas **met** the target. One of the three subject areas **did not meet** the target.

Analysis: The national Education Testing Systems (ETS) Major Field Test (MFT) was taken in the spring of 2019 to be used as a national baseline norm over the course of the next 5 years examining the students' comprehensive knowledge of materials over each school of business content area. Additionally, every other year students are given the SoBUSKE, our internal exam, focusing on the specific discipline areas. We compare these results against corresponding discipline areas of the nationally normed ETS MFT in business.

The results of the 2019 Spring ETS exam and the results of the AC 2022-2023 SoBUSKE are summarized in the table below. The acceptable target was met for two of the three subject areas in 2020-2021 as well as 2022-2023. The ideal target was met for two of the three subject areas in 2020-2021 as well as 2022-2023. While the table shows an increase or a maintenance of the percentage of students scoring higher than the ETS mean, this comparison is not a valid comparison as the 2020-2021 numbers included all students completing the partial School of Business Knowledge exam while the 2022-2023 numbers included only the CIS students completing the partial School of Business Knowledge exam.

Table 7: SLO 2 Summary

Subject	2019 ETS Mean % Correct (n=13) – All Majors	AC 20-21 SoBUSKE Mean % Correct – All Majors	AC 20-21 Acceptable Target Met? – All Majors	AC 22-23 SoBUSKE Partial Exam % Correct – CIS Majors Only	AC 22-23 Acceptable Target Met – CIS Majors Only
Quantitative Business Analysis	28%	57% n=65	Yes 98.2% scored better than the ETS' 28%	57% n=8	Yes 100% scored better than the ETS' 28%
Finance	44%	41% n=81 (Fall 20)	No 49.3% scored better than the ETS' 44%	58% n=17	No 53% scored better than the ETS' 44%
Marketing	45%	87% n=16 (Spring 21)	Yes 100% scored better than the ETS' 45%	80% n=5	Yes 100% scored better than the ETS' 45%

Assessment Cycle 2022 – 2023

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

BUAD2120 Subcategory

Analysis (BUAD2120 only): Results from the ETS exam (2019), SoBUSKE (AC 2020-2021), and SoBUSKE (AC 2022-2023) are compared for business statistics in the table below. This table refers to Measure 2.1a.

Table 8: Measure 2.1a: Basic Business Statistics

Discipline	NSU ETS 2019	SoBUSKE AC 20-21 All Majors	SoBUSKE AC 22-23 CIS Majors Only
Statistics	28%	57%	57%
Percentages indicate the student mean percentage on the discipline area test. Data was collected in courses where the partial SoBUSKE was normally embedded as part ofthe course materials.			

Note: The scores in the chart above are the unprocessed student mean scores. These are presented for easy interpretation of student trends.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. Sixty-five students took the portion of the SoBUSKE that relates to the area of statistics. Six of these students were removed from the sample because they responded to no questions. Following compilation of these scores, the SoBUSKE mean score in statistics was 57% while the NSU ETS MFT score was 28%. Based on a comparison of these results, 98.2% of the students scored above 28% on the SoBUSKE.

Based on the analysis of the AC 2020-2021 results, the BUAD2120 faculty made the following changes in AC 2021-2022 and AC 2022-2023 to drive the cycle of improvement. They developed and implemented a strategic communication plan to emphasize specific learning resources available to students. They produced instructor-led videos that demonstrated concepts and techniques taught in the course. They increased the focus on the hypothesis testing procedure theory in relation to decision-making. Finally, they created and disseminated a mapped-out flow chart depicting the decision process on the selection of specific inferential tests.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the statistics portion of the partial knowledge exam while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four

student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, eight CIS students completed the SoBUSKE partial exam for statistics. Of these eight students, 100% scored better than the ETS score of 28%.

Decision (BUAD only):

In AC 2022-2023, the acceptable target and the ideal target were **met**. Based on the analysis of the AC 2022-2023 results, the BUAD2120 faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

While the percentage of students scoring higher than the ETS score was outstanding at 100%, the mean percentage remained constant at 57%. Thus, this percentage could improve.

To improve this percentage, the BUAD2120 faculty will incorporate the use of Excel into the publisher application that they are currently using. The incorporation of Excel will allow students to practice utilizing Excel more which will reinforce many of the topics covered on the statistics exam. This incorporation will also allow faculty to focus more on the use of statistics to make decisions as opposed to the underlying statistical theories.

This change will improve the student's ability to understand key concepts and theories in statistics.

FIN 3090 Subcategory

Analysis (FIN only): Results from the past ETS exam (2019), SoBUSKE (AC 2020-2021), and SoBUSKE (AC 2022-2023) are compared for finance in the table below. This table refers to measure 2.1b.

Table 9: Measure 2.1b: Finance

Discipline	NSU ETS 2019	SoBUSKE AC 20-21 All Majors	SoBUSKE AC 22-23 CIS Majors Only
Finance	44%	41%	58%
Percentages indicate the student mean percentage on the measure. Data collected where the partial SoBUSKE was integrated into the course.			

Note: The scores in the chart above are the unprocessed student mean scores. These are presented for easy interpretation of student trends.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

Assessment Cycle 2022 – 2023

In AC 2020-2021, the acceptable target was **not** met and the ideal target was **not** met. Eighty-one students took the portion of the SoBUSKE that relates to the area of finance. Six of these students were removed from the sample because they responded to no questions. Following compilation of these scores, the SoBUSKE mean score in finance was 41% while the NSU ETS MFT score was 44%. Based on a comparison of these results, 49.3% of the students scored above 44% on the SoBUSKE.

Based on the analysis of the AC 2020-2021 results, the faculty determined that the partial knowledge exam needed to be given in FIN 3090 instead of FIN 2150. This change was due to students not covering many of the finance components until FIN 3090. Additionally, Accounting and Computer Information Systems students were not required to take FIN 2150, so the measurement was excluding two of the three disciplines.

As a result of these changes, in AC 2022-2023, the acceptable target was **not** met and the ideal target was **not** met. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the statistics portion of the partial knowledge exam while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, seventeen CIS students completed the SoBUSKE partial exam for statistics. Of these seventeen students, 53% scored better than the ETS score of 44%.

Decision (FIN only):

In AC 2022-2023, the acceptable target and the ideal target were **not** met. Based on the analysis of the AC 2022-2023 results, the Finance faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

While a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable, it should be noted that had the faculty continued to analyze all majors in the results, the mean score would have increased as well as the percentage of students scoring higher than the ETS average. While the increase was not enough to meet the targets, this increase did represent progress towards the goals. Thus, the change in testing from FIN 2150 to FIN 3090 may have helped.

For the number specifically for CIS students, it represents a baseline comparison number to which future changes can be measured.

Additionally, the Finance faculty are reviewing the topics covered in FIN 3090 and FIN 4200 to ensure a distribution of topics between the two classes to enhance success in the Finance classes. The Finance faculty members put forth a lot of effort to ensure success in the classes, but realize students often struggle in classes with a lot of mathematical or computational thinking. This redistribution of topics is expected to enhance the amount of time spent on topics covered by the finance partial knowledge

exam. The Finance faculty will ensure that any topics covered in the finance partial knowledge exam remain in the FIN 3090 class.

This change will improve the student's ability to understand key concepts and theories in finance.

MKTG3230 Subcategory

Analysis (MKTG only): Results from the ETS exam (2019), SoBUSKE (AC2020-2021), and SoBUSKE (AC 2022-2023) are compared for marketing in the table below. This table refers to measure 2.1c.

Table 10: Measure 2.1c: Marketing

Discipline	NSU ETS 2019	SoBUSKE AC 20-21 All Majors	SoBUSKE AC 22-23 CIS Majors Only
Marketing	45%	87%	80%
Percentages indicate the student mean percentage on the measure. Data collected where the partial SoBUSKE was integrated into the course.			

Note: The scores in the chart above are the unprocessed student mean scores. These are presented for easy interpretation of student trends.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. Sixteen students took the portion of the SoBUSKE that relates to the area of marketing. Following compilation of these scores, the SoBUSKE mean score in marketing was 87% while the NSU ETS MFT score was 45%. Based on a comparison of these results, 100% of the students scored above 45% on the SoBUSKE.

Based on the analysis of the AC 2020-2021 results, the MKTG3230 faculty member held multiple review sessions over core content in the class. The faculty member also researched and participated in in-class activities shown to engage larger class sizes.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the marketing portion of the partial knowledge exam while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, five CIS students completed the SoBUSKE partial exam for marketing. Of those five students, 100% scored better than the ETS score of 45%.

Decision (MKTG only):

In AC 2022-2023, the acceptable target and the ideal target were met. Based on the analysis of the AC 2022-2023 results, the Finance faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

While the percentage of students scoring higher than the ETS score was outstanding at 100%, the mean percentage was at 80%. Thus, this percentage could improve. However, limited conclusion should be drawn from this percentage due to the low number of students in the sample size.

Given that only five CIS students completed this partial knowledge exam for Marketing, the MKTG3230 faculty member will increase his efforts to ensure that more CIS students are completing the partial knowledge exam. The faculty member will reiterate the importance of measuring this knowledge to the students in the MKTG3230 class.

This change will improve the faculty's ability to judge and improve the students' ability to understand key concepts and theories in marketing.

Measure 2.2 (Direct – Exam; UNIV 1000 Complete School of Business Knowledge Exam)

Details/Description: The entire School of Business Knowledge exam (SoBUSKE) should be given in UNIV 1000 business classes. The following areas are covered in this exam: Accounting, Economics, Management, Quantitative (Statistics and Operations Management), Finance, Marketing, Legal, Information Systems, International Business, and Ethics.

Acceptable Target: At least 75% of students will score higher than the ETS averagein the knowledge area.

Ideal Target: At least 85% of students will score higher than the ETS average in the knowledge area.

Implementation Plan (timeline): These partial School of Business Knowledge Exams are given each semester the class is offered.

Key/Responsible Personnel: School of Business faculty teaching these courses are responsible for the measurement.

Findings: The target was not measured.

Analysis: The first set of data for this measure was gathered in UNIV 1000, a course for entering freshmen, in Fall 2020. The data from that semester is below.

Assessment Cycle 2022 – 2023

Table 11: Measure 2.2: SoBUSKE and ETS Exam Results (Intermediate)

ETS Subject Area	2019 ETS Mean Percent Correct (n=13)	AC 20-21 SoBUSKE Results from UNIV 1000 (n=46)	Target met?
Accounting	41%	28%	No (8.7% scored higher than 41%)
Economics	30%	29%	No (28% score higher than 30%)
Management	52%	30%	No (6.5% scored higher than 52%)
Quantitative Business Analysis	28%	37%	Yes (80.4% scored higher than 28%)
Finance	44%	25%	No (10% scored higher than 44%)
Marketing	45%	32%	No (13% scored higher than 45%)
Legal and Social Environment	36%	45.% (Avg of 3 law classes)	No (73.9% scored higher than 36%)
Information Systems	47%	30%	No (17% scored higher than 47%)
International Issues	35%	24%	No (13% scored higher than 35%)
Ethics	N/A	35%	N/A

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the target was **not** met. Forty-six students took the SoBUSKE exam in Fall 2020. These students did not fare well on the exam with only one area meeting the target. Faculty members believe this area was an anomaly.

Based on the analysis of the AC 2020-2021 results as well as previous year results, the School of Business faculty determined that this measurement was not giving any useful information. The School of Business faculty determined this measurement

would not be included in UNIV1000 any longer.

As a result of these changes, in AC 2022-2023, the target was not measured.

Decision:

In AC 2022-2023, the target was not measured. Based on the previous analysis of past year's results, the faculty will discontinue the use of this measurement going forward.

Measure 2.3 (Direct - Student Artifact; MGT 4300/CIS 4600 Complete School of Business Knowledge Exam)

Details/Description: The entire School of Business Knowledge exam (SoBUSKE) (https://www.surveymonkey.com/r/N8DNVXT) should be given in either MGT 4300 or CIS 4600. The following areas are covered in this exam: Accounting, Economics, Management, Quantitative (Statistics and Operations Management), Finance, Marketing, Legal, Information Systems, International Business, and Ethics.

Note: In accordance with the school of business' assessment plan, the SoBUSKE is given every other year. Therefore, testing data from AC 2019-2020 is typically the same data as from the 2018-2019 assessment cycle.

Acceptable Target: Average score on School of Business Knowledge exam shouldbe higher in all areas of the exam than the ETS Mean Percentage.

Ideal Target: Average scores on School of Business Knowledge exam should be 10%higher in all areas of the exam than the ETS Mean Percentage.

Implementation Plan (timeline): The School of Business Knowledge exam is given each semester MGT 4300 and/or CIS 4600 is offered.

Key/Responsible Personnel: School of Business Faculty teaching either MGT 4300 or CIS 4600 are responsible for this measure.

Findings: The acceptable target was **not** met, and the ideal target was **not** met.

Analysis: The full SoBUSKE was administered in AC 2020-2021 and AC 2022-2023 in MGT 4300 and CIS 4600. These classes typically have many students who are nearing graduation. A breakdown of those students' average scores is shown and compared to the 2019 ETSexam results in the table below.

Assessment Cycle 2022 – 2023

Table 12: Measure 2.3: SoBUSKE and ETS Exam Results (Exit) – All Majors

ETS Subject Area	2019 ETS Mean Percent Correct (n=13)	AC 20-21 SoBUSKE (n=75) – All Majors	Target met?	AC 22-23 SoBUSKE Results (n=20) – CIS Majors Only	Target met?
Accounting	41%	35%	No	35%	No
Economics	30%	33%	Yes	32%	Yes
Management	52%	38%	No	40%	No
Quantitative Business Analysis	28%	38%	Yes	48%	Yes
Finance	44%	28%	No	43%	No
Marketing	45%	43%	No	46%	Yes
Legal and Social Environment	36%	50.5%	Yes	75%	Yes
Information Systems	47%	45%	No	47%	No
International Issues	35%	31%	No	37%	Yes
Ethics	N/A	42%	N/A	52%	N/A

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the target was **not** met. Only three of the nine categories had a mean on the SoBUSKE greater than the mean on the ETS. Those three areas were economics, quantitative business analysis, and legal and social environment. Given the decrease in scores, faculty members believed the COVID-19 pandemic and its resulting changes to higher education affected students and their performance on the exam.

Based on the analysis of the AC 2020-2021 results, the School of Business faculty members believed the results would rebound once faculty and students returned to a more normal classroom environment. Faculty members also emphasized material that was causing difficulties for students in their classes. As appropriate, additional assignments or practice were assigned.

Assessment Cycle 2022 – 2023

As a result of these changes, in AC 2022-2023, the acceptable target was **not** met and the ideal target was **not** met. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the knowledge exam while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, twenty CIS students completed the knowledge exam. The CIS students scored higher than the ETS mean in five of the nine categories. Those categories were economics, quantitative business analysis, marketing, international issues, and legal and social environment. In two additional categories, the CIS students scored at the same rate or within a point. Those two categories were finance and information systems. The remaining two categories where the mean was lower by more than a point were accounting and management.

Decision:

In AC 2022-2023, the acceptable target and the ideal target were **not** met. Based on the analysis of the AC 2022-2023 results, the School of Business faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

One issue that continues to affect the SoBUSKE is the lack of effort students give to the exam. While the CIS 4600 faculty member urges the students to attempt the exam and tries to encourage them to do well, given the presence of a large capstone project and the number of other assignments in the CIS 4600 class, students do not try at a high level on the exam as they do not believe it will affect their grade.

Given this lack of effort, the CIS 4600 member will reiterate the importance of measuring student learning and will continue to promote students giving their best effort on the exam.

This change will improve the faculty's ability to judge and improve the students' ability to understand key concepts and theories in various functional areas of business.

SLO 3. <u>Critical Thinking.</u> The objectives of SLO3 Critical Thinking are that students should be able to:

- Objective 3a: Demonstrate the ability to draw on knowledge and insights from a variety of disciplines when analyzing and formulating solutions to problems and opportunities.

- Objective 3b: Demonstrate the ability to generate and compare alternatives solutions to business problems.

- Objective 3c: Demonstrate the ability to select feasible solutions to complex

business problems.

Course Map: Tied to course syllabus objectives.

FIN 3090   Business Finance (Foundational Course)
FIN 4200   Financial Policies and Practices (Foundational Course)
MGT 4300   Strategic Management and Policies (Foundational Course)
UNIV 1000   The University Experience (Supporting Course)

Measure 3.1 (Direct – Other; FIN 3090 Critical Thinking Quiz)

Details/Description: To access critical thinking skills, students are required to compose two two-page essays with references. The essay must analyze and critique a current topic in business finance. The topic must be clearly identified and analyzed, incorporating business and finance terminology. Sample topics include but are not limited to:

- Corporate social responsibility and good governance issues.
- What determines interest rates, and what role do they play in financial markets and institutions in the global financial system.
- Concept of the cost of capital, how it is affected by the firm's capital structure, and the application of these concepts to capital budgeting, decision-making, and dividend policy.
- The impact of the Internet on working capital management.
- Various sources of financing working capital
- Risk and volatility.
- Asset management
- Financial performance.
- Hedge funds.
- Financial statement analysis.
- International finance.

Acceptable Target: The acceptable target is an average of 75% and 70% of the students achieving a 70% or greater.

Ideal Target: The ideal target is an average of 80% and 80% of the students achievinga 70% or greater.

Implementation Plan (timeline): This measure is given each spring semester in the FIN 3090 class.

Key/Responsible Personnel: School of Business faculty teaching FIN 3090 are responsible for this measure.

Findings: The acceptable target was **met**. The ideal target was **met**.

Analysis: The table below provides the AC 2020-2021 and AC 2022-2023 results for Measure 3a. Please note that the 2020-2021 results are based on a critical thinking quiz instead of two essays.

Assessment Cycle 2022 – 2023

Table 13: AY 2020-21 Results

Academic Year	Measure 3a				
	n (# of students)	Acceptable Target	Average Score	Percentage Passing Acceptable Target	Percentage Passing
2020-2021 – All Majors	45	75%	70%	70%	69%
2022-2023 – CIS Majors Only		75%	89%	70%	100%

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **not** met and the ideal target was **not** met. Forty-five students took the critical thinking quiz and earned an average score of 70%. Sixty-nine percent of the students passed with a 70% or higher.

Based on the analysis of the AC 2020-2021 results, the faculty made the following changes in 2021-2022 and 2022-2023 to drive the cycle of improvement. The faculty decided to change from a quiz to a measurement based on essays related to analyzing and critiquing a current topic in business finance. Students had to write two two-page essays with references. To encourage more thoughtful discussion, the instructor used a more stringent grading system based on the quality of the submission and discussion.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the quiz while the 2022-2023 numbers included only the CIS students who completed the essays. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, the CIS students scored an average of 89% on the essays with 100% of the students passing the essays assignment with a 70% or higher score.

Decision:

In AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. Based on the analysis of the AC 2022-2023 results, the School of Business faculty will implement the following changes in AC 2023-2024 to drive the cycle of improvement.

First, the FIN 3090 faculty member will keep the change involving moving from a critical thinking quiz to essays. While the 2022-2023 results were for CIS majors only, the results would have shown an increase for all majors if we had continued using that group.

The FIN 3090 faculty member will ensure topics in business finance are current and relate to future responsibilities of CIS graduates.

These changes will improve the students' ability to think critically in the business environment.

Measure 3.2 (Direct – Other; FIN 4200 Business Simulation Game)

Details/Description: In AY 2017-2018, a business simulation game was added to FIN 4200 as a method for students to make business decisions, analyze results, and modify their decisions. The business simulation game is called GoVentureCEO. In this game students choose are given an initial budget and allocate those funds to Production, Distribution, R&D, Marketing, Human Resources, and Ethics. Students determine how many units to produce, how much to invest in R&D to make a better product, how much to charge per unit, whether to expand to new areas, and how much to spend on marketing of the product. The game takes place over 6-8 periods and students update their decisions each period after analyzing their results. Students compete against each other to be the most profitable and decisions made by other students affect results. Credit is given for activity and bonus points are given to the top performers.

Acceptable Target: 50% of the students will be profitable over the course of the game.

Ideal Target: 75% of the students will be profitable.

Implementation Plan (timeline): Game is offered each semester in FIN 4200.

Key/Responsible Personnel: School of Business Faculty teaching FIN 4200

Findings: The target was not measured.

Analysis: The table below provides the AC 2020-21 academic year results for Measure 3b.

Table 14: AY 2020-21 Results

Measure 3b				
Academic Year	n (# of students)	Percent Profitable	Avg. Profit Period 1	Avg. Profit Period 8
2020-2021	39	76%	2.66	16.8

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. Thirty-

nine students participated in the game and 76% of the students were profitable. In the fall semester, three students performed better than the instructor for the first time.

Based on the analysis of the AC 2020-2021 results, the initial plan was for the FIN 4200 instructor faculty member to offer a wider variety of businesses in the simulation game. However, that faculty member retired and a new faculty member decided to incorporate a comprehensive project involving data analysis in Excel and a comprehensive report of findings.

Furthermore, based on the need to split the results by major, this measurement became unnecessary for the CIS degree program. CIS majors do not take the FIN 4200 class unless they are double majoring or have another specific reason to do so.

Thus, as a result of these changes, in AC 2022-2023, the target was not measured.

Decision:

In AC 2022-2023, the target was not measured. Based on CIS students not taking the FIN 4200 class, the CIS faculty will discontinue the use of this measurement going forward.

Measure 3.3 (Direct – Other; FIN 3090 Case Analysis)

Details/Description: Case studies link financial ideas to real events and real policies. Finance 3090 examines corporate financing, investment decisions and related issues in financial strategy. The student must deal with the situation described in the case, in the role of the manager or decision maker facing the situation. By engaging in the case, students apply the concepts, techniques and methods of the discipline and improve their ability to apply them. Students are required to identify the principal questions of the case and perform an analysis using the appropriate tools and knowledge to identify challenges and ambiguities in the case. Students learn the material more deeply when they are active generators rather than passive recipients of knowledge and retain more of the material as they apply the concepts and methods. Cases compel students to work on real world problems that are complicated and messy which require students to hone skills in identifying and using evidence, choosing which concepts, theories and methods are relevant, and ignoring extraneous and irrelevant material. Case analysis develops skills in problem solving, quantitative and/or qualitative analytical tools, decision making in complex situations, and coping with ambiguities.

Acceptable Target: The acceptable target is an average of 75% and 70% of the students achieving a 70% or greater.

Ideal Target: The ideal target is an average of 80% and 80% of the students achievinga 70% or greater.

Implementation Plan (timeline): This assignment measure is given each semester in the FIN 3090 class.

Key/Responsible Personnel: School of Business faculty teaching FIN 3090 are responsible for this measure.

Assessment Cycle 2022 – 2023

Findings: The acceptable target was **met**.

Analysis: The table below provides the AC 2020-2021 and AC 2022-2023 results for Measure 3.3.

Table 15: AY 2020-21 through AY 2022-23 Results

Academic Year	# of Students	Average Score Acceptable Target	Average Score	Percentage Passing Acceptable Target	Percentage Passing
2020-21 (All Majors)	65	75%		70%	83.4%
2022-2023 (CIS Majors Only)	24	75%	83%	70%	87.5%

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. Sixty-five students completed the FIN 3090 case analysis. Of those sixty-five students, 83.4% passed the case analysis with a 70% or higher score.

Based on the analysis of the AC 2020-2021 results, the faculty made the following changes in AC 2021-2022 and AC 2022-2023 to drive the cycle of improvement. Students were introduced to XBRL and used it to gather current and historical company data. The FIN 3090 faculty member believed that this new technology allowed students to better see the impact of company decision which led to improved ability to perform case analyses.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all students who completed the case analysis while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 24 CIS students completed the case analysis. Of these students, 87.5% passed the case analysis with a 70% or higher score. The average score was an 83%.

Decision:

In AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in 2023-2024 to drive the cycle of improvement.

While the 2022-2023 results were for CIS majors only, the results would have shown an

increase for all majors if we had continued using that group. Thus, the instructor will maintain the adoption of the XBRL technology and reinforce its use in the FIN 3090 case analysis.

As previously noted, the Finance faculty are reviewing the topics covered in FIN 3090 and FIN 4200 to ensure a distribution of topics between the two classes that could potentially enhance success in the Finance classes. This redistribution of topics could enhance the amount of time spent on topics covered by the case analysis. The Finance faculty will ensure that any topics covered in the case analysis remain in FIN 3090.

This change will improve the students' ability to think critically in the business environment.

SLO 4. <u>Global, Cultural, and Ethical Perspective</u>. Students should be able to: Identify cultural/global challenges facing management in doing business in the international arena.

Course Map: Tied to course syllabus below.

ACCT 2000 Financial Accounting (Foundational Course)
BUAD 2200 Business Reports and Communications (Foundational Course)
BUAD 3270 International Business (Foundational Course)
CIS 4600   Advanced Systems Development (Capstone Course)
MGT 4300   Strategic Management and Policies (Capstone Course)
UNIV 1000   The Student Experience (Supporting Course)

Measure 4.1. (Direct – Exam; BUAD 2200 – Country Report

Details/Description: Written document measure (BUAD 2200)

Acceptable Target: 70% of the students will score 70% or better.

Ideal Target: 90% of the students will score 70% or better.

Implementation Plan (timeline): Ongoing in BUAD 2200.

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 2200.

Finding: The acceptable target was <u>**met**</u>.

Analysis: The table below shows the results for the AC 2020-2021 and the AC 2022-2023 for Measure 4.1.

Table 16: AC 2020-2021 vs. AC 2022-2023 Comparison

Measure 4.1				
Academic Year	n (# of teams) or n (# of students)	Acceptable Target	Ideal Target	Actual Results
2020-2021 (All Majors)	50	70%	90%	88%
2022-2023 (CIS	38	70%	90%	95%

Assessment Cycle 2022 – 2023

Majors Only)				
Percentages indicate the percent of teams scoring 70% or better on the measure.				

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **not** met. During the AC 2020-2021, fifty groups (n=237) completed the BUAD2200 country report and assignment and 88% of the teams (n=50) scored 70% or better. This score was an 8% decrease from the AC 2018-2019. Only 184 of the 237 students were included in the data analysis process as 53 students (22%) did not complete the assessment piece. This rate is a increase from the approximately 10% of students who did not complete the assignment in the past. Non-participating students stated COVID issues, hurricane related issues, and/or job/time issues prevented them from completing the assessment.

Based on the analysis of the AC 2020-2021 results the faculty made the following changes in AC 2022-2023 to drive the cycle of improvement. BUAD2200 faculty members added short instruction videos to the class as well as a reading list of possible book sources about cultural differences, social and business etiquette, political patterns, family life, etc. To increase the participation rate students were asked to indicate their understanding of the requirements for the course and that the report project was mandatory for all students, including both the oral and written components. The assessment project was introduced earlier in the semester and students submitted portions of the assessment for review by BUAD2200 faculty members.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all teams who completed the country report while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, thirty-eight students participated in the country report. Of these students, 95% scored a 70% or better on the country report.

Decision:

In AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in 2023-2024 to drive the cycle of improvement.

Again, after discussions in 2022-2023, the CIS faculty will vote on the inclusion of COMM1010 – Oral Communication in addition to BUAD2200 – Business Reports and Communication in the CIS curriculum. If approved by the School of Business and the University Curriculum Review Committee, this inclusion will help strengthen the written and oral skills of the CIS students once implemented.

Assessment Cycle 2022 – 2023

Instructors of the course will also attempt to lower the number of students not completing the assessment. An increase in the response rate would allow for a more accurate measurement of the students' abilities in this area.

The changes will improve the students' ability to identify cultural/global challenges facing management in doing business in the international arena.

Measure 4.2 (Direct – Exam; BUAD 3270 International Business Plan)

Details/Description: Middle measure of student knowledge of cultural/global perspectives; a written document measure in BUAD 3270.

Acceptable Target: 70% of the students will score 70% or better.

Ideal Target: 90% of the students will score 70% or better.

Implementation Plan (timeline): Ongoing in BUAD 3270 class.

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 3270.

Finding: The ideal target was **met**

Analysis: The table below shows the results for the AC 2020-2021 and the AC 2022-2023 for Measure 4.2.

Table 17: AC 2020-2021 vs. AC 2022-2023 Comparison

Measure 4.2					
Assessment Cycle	n (# of students)	Acceptable Target	Ideal Target	Actual Results*	Mean
2020-2021 (All Majors)	164	70%	90%	100%	89%
2022-2023 (Only CIS Majors)	39	70%	90%	100%	95%

*Percentages indicate the percent of teams scoring 70% or better on the measure.

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target was **met** and the ideal target was **met**. One hundred and sixty-four students participated in the written final report of the International Business Plan group project. The average grade of the 164 students for the written document was 89%. One hundred percent of the students scored 70% or better on this written document. The mean final report grade increased by 4% as compared to AC 2018-2019 while the percentage of students scoring 70% or better increased by 4% as well.

Based on the analysis of the AC 2020-2021 results, the faculty made the following

changes in AC 2022-2023 to drive the cycle of improvement. The BUAD3270 faculty members continued to utilize Microsoft Teams and required all groups to make improvement for Part A and Part B after receipt of the instructor's feedback. The BUAD3270 faculty members introduced international business research databases and tools in their classes to enhance the quality of research for the international business plan.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all teams who completed the international business plan while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 39 students completed the international business plan. Of these students, 100% scored a 70% or better. The mean score for these students was 95%.

Decision:

In AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in 2023-2024 to drive the cycle of improvement.

To further enhance the use of the research databases and tools, the BUAD3270 instructors will create a section within the Moodle shell that is related to the group project. Within that section, the BUAD3270 instructions will list and link the international business research databases and tools that could be used to enhance the quality of the students' research.

This change will improve the students' ability to identify cultural/global challenges facing management in doing business in the international arena.

Measure 4.3 (Direct – Exam, Partial School of Business Knowledge Exam)

Details/Description: Partial School of Business Knowledge Exam Given in BUAD 3270

Acceptable Target: Average score should be equal or higher than the ETS International Business score.

Ideal Target: Average score should be 10% higher than the ETS International Business score.

Implementation Plan (timeline): Ongoing in BUAD 3270 sections

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 3270 Sections.

Assessment Cycle 2022 – 2023

Findings: The acceptable and ideal targets were **met.**

Analysis: The table below shows the results for AC 2020-2021 and AC 2022-2023 for Measure 4.3.

Table 18: AC 2020-2021 vs. AC 2022-2023 Comparison

Measure 4.3				
Academic Year	n (# of students)	Acceptable Target (based on ETS data)	Ideal Target (based on ETS data)	Mean
2020-2021 (All Majors)	88	35%	45%,	49%
2022-2023 (CIS Majors Only)	15	35%	45%	55%

Data was not reported for the AC 2021-2022 as it was decided that data for this SLO would only be reported every two years.

In AC 2020-2021, the acceptable target and the ideal target were **met**. Only 43 students out of 88 passed at or above the acceptable target of 70% for the International Business partial SoBUSKE exam. Thus, the average score for that year was 49%, which was a 3% loss from 2018-2019. Some of that loss was attributable to COVID as well as multiple weather events. An increase in the rigor of the course may have also contributed to the decrease.

Based on the analysis of the AC 2020-2021 results, the faculty made the following changes in AC 2021-2022 and AC 2022-2023 to drive the cycle of improvement. The BUAD3270 faculty developed a mini lesson to summarize the major ideas of International Business which was available in all sections for students.

As a result of these changes, in AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. However, due to a change in the measurement, a direct comparison between AC 2020-2021 and AC 2022-2023 is not advisable. The AC 2020-2021 numbers included all teams who completed the SoBUSKE partial exam in international business while the 2022-2023 numbers included only the CIS students. While Accounting, Business Administration, and Computer Information Systems have shared the first four student learning outcome goals for many years, this change allows the faculty in each discipline to better analyze the results for their students and make changes to their degree plan which will then be reflected in their students' results.

In AC 2022-2023, 15 students took the SoBUSKE partial knowledge exam in international business. These students earned a mean score of 55% which was 10% higher than the ideal target and 20% higher than the acceptable target.

Decision:

In AC 2022-2023, the acceptable target was **met** and the ideal target was **met**. Based on the analysis of the AC 2022-2023 results, the faculty will implement the following changes in 2023-2024 to drive the cycle of improvement.

Assessment Cycle 2022 – 2023

To further enhance the use of the research databases and tools, the BUAD3270 instructors will create a section within the Moodle shell that is related to the group project. Within that section, the BUAD3270 instructions will list and link the international business research databases and tools that could be used to enhance the quality of the students' research. While this enhancement will assist students with their international business plan, it will also assist them in learning international business concepts.

This change will improve the students' ability to identify cultural/global challenges facing management in doing business in the international arena.

SLO 5: Students will demonstrate the ability to solve problems from an integrated multi-disciplinary business perspective.

Course Map: Tied to course syllabus objectives.

CIS 1015 – Introduction to Computer Information Systems (Foundational Course)
CIS 1030 – Introduction to Software Development (Foundational Course)
CIS 2050 – Essentials of Network Design and Hardware (Foundational Course)
CIS 2980 – Database Systems (Foundational Course)
CIS 3020 – Web Page Development (Foundational Course)
CIS 3900 – Systems Analysis and Development (Capstone Course)
CIS 4600 – Advanced Systems Development (Capstone Course)

Measure 5.1. (Direct – knowledge)

The comprehensive computer information systems knowledge exam was given in CIS 1015 – Introduction to Computer Information Systems to establish a baseline. For a midpoint measurement, faculty administered the exam in CIS 3300 – Intermediate Object-Oriented Programming and CIS 3400 – Telecommunications and Networks. For the final measurement, faculty administered the exam in CIS 4600 – Advanced Systems Development. The acceptable target was students would score an 80% or better.

Findings:

AC 2021 – 2022: The 80% target was **not** met.

Analysis. In 2019-2020, the target was <u>not</u> met. The actual percentages by subject area are as follows for the final measurement:
- 49% for Introduction to Computer Information Systems
- 43% for Introduction to Software Development
- 51% for Essentials of Network Design and Hardware
- 57% for Database Systems
- 32% for Web Page Development
- 37% for Systems Analysis and Development
- 29% for Advanced Systems Development

Table 19 shows more detailed results from the comprehensive examination.

Assessment Cycle 2022 – 2023

Table 19: Results from the 2019-2020 Comprehensive CIS Knowledge Exam

	Question Type	CIS 1015	CIS 3300 & CIS 3400	CIS 4600
Responses		177	60	35
		Percentage Correct		
1015 Q1 - Loop	MC	24%	70%	83%
1015 Q2 - Planning	MC	86%	90%	86%
1015 Q3 - Structured Program Characteristics	Essay	2%	13%	23%
1015 Q4 - Benefits of Structures	Essay	0%	0%	3%
CIS 1015 Average		28%	43%	49%
1030 Q1 - Object of a Class	MC	20%	52%	60%
1030 Q2 - Value of X	MC	22%	43%	43%
1030 Q3 - Variable Definition	Essay	3%	38%	23%
1030 Q4 - Types of Control Structures	Essay	14%	52%	46%
CIS 1030 Average		15%	46%	43%
2050 Q1 - Type of Computer Network	MC	40%	55%	63%
2050 Q2 - Unit of Clock Speed	MC	36%	70%	66%
2050 Q3 - Microchip on Motherboard	MC	27%	52%	63%
2050 Q4 - Troubleshooting Process	Essay	12%	40%	40%
2050 Q5 - Dual and Quad Channel Memory	Essay	12%	37%	26%
CIS 2050 Average		25%	51%	51%
2980 Q1 - Normalization	MC	68%	80%	74%
2980 Q2 - Many-to-many Relationship	MC	36%	57%	57%
2980 Q3 - Types of Relationships	Essay	16%	75%	54%
2980 Q4 - ERDs	Essay	5%	45%	43%
CIS 2980 Average		31%	64%	57%
3020 Q1 - Link	MC	9%	38%	40%
3020 Q2 - Inline Images Attribute	MC	20%	22%	29%
3020 Q3 - Selected Option Button	MC	10%	27%	29%
3020 Q4 - Connecting to External	Essay			

CSS File				
3020 Q5 - Creating Rows and Columns	Essay			
CIS 3020 Average		13%	29%	32%
3900 Q1 - SDLC Analysis Phase	MC	38%	38%	49%
3900 Q2 - Dynamic Schedule	MC	23%	33%	51%
3900 Q3 - Phases of SDLC	Essay	6%	10%	20%
3900 Q4 - Functional Model Elements	Essay	4%	22%	29%
CIS 3900 Average		18%	26%	37%
4600 Q1 - Agile Software Development	MC	27%	30%	34%
4600 Q2 - Scrum Phases	MC	42%	42%	40%
4600 Q3 - 2nd Value of Agile Manifesto	Essay	3%	13%	20%
4600 Q4 - SCRUM framework	Essay	3%	8%	20%
CIS 4600 Average		19%	23%	29%

For the 2019-2020 academic cycle, some areas of concern remained that were also identified in the 2017-2018 academic cycle.

As with the 2017-2018 academic cycle, the expectation for the CIS 1015, CIS 1030, CIS 2050, CIS 2980, and CIS 3020 responses was lower responses from the CIS 1015 test group followed by increased scores at the midpoint. For the final point, the expectation was maintenance or further increase from the midpoint. All five areas saw increases from the baseline to the midpoint. However, two of the five groups (CIS 1030 and CIS 2980) saw decreases from the midpoint to the final measurement.

The expectation for the CIS 3900 and CIS 4600 responses was for lower accurate responses from the baseline and midpoint groups with increased accurate responses for the final measurement. In contrast to the 2017-2018 academic cycle, both groups increased for the final measurement.

The results indicated the most difficulties with Web Page Development concepts, Advanced Systems Development concepts, and Systems Analysis & Design concept. For the latter two areas, these results may be due a lack of effort by the seniors participating in the final measurement.

Assessment Cycle 2022 – 2023

The Web Development responses are partially explained by an error found in the data gathering document. Part of the answers for the questions involved HTML code. In the analysis of results, the faculty found the HTML code was not being outputted correctly to allow for correct analysis.

Overall, while the percentages increased from the 2017-2018 cycle to the 2019-2020 academic cycle, they were still further from the ideal target than desired.

Additionally, while we cannot measure the impact on the results, the COVID-19 crisis could have also impacted the results. Student were removed from normal routines, face-to-face classes were moved to online classes in less than a week, and substantial stress was placed on faculty and students. These changes could have negatively impacted the performance on the assessment.

Based on the analysis of the 2019-2020 results, the faculty implemented the following changes in 2020-2021 and 2021-2022 to drive the cycle of improvement. First, the faculty reviewed the Web Development questions to determine how the information could be collected and allow for valid data and analysis. Changes were made to the survey instrument to allow for this collection and analysis in the 2021-2022 assessment cycle.

Faculty also met to discuss how to improve student effort on the exams. Each faculty member made the decision in their class as to how to best incorporate the exam to meet the goal of increasing student effort and improving academic integrity.

Additionally, faculty continued to refine the materials and teaching methodologies in the classes that lead to these questions. For example, in CIS 1015, the instructor changed the course materials to better prepare students for later classes.

Despite these changes, in 2021-2022, the target was **not** met. The actual percentages by subject area are as follows for the final measurement:
- 44% for Introduction to Computer Information Systems
- 32% for Introduction to Software Development
- 51% for Essentials of Network Design and Hardware
- 64% for Database Systems
- 15% for Web Page Development
- 28% for Systems Analysis and Development
- 29% for Advanced Systems Development

Table 20 shows more detailed results from the comprehensive examination.

Assessment Cycle 2022 – 2023

Table 20: Results from the 2021-2022 Comprehensive CIS Knowledge Exam

	Question Type	CIS 1015	CIS 3300 & CIS 3400	CIS 4600
Responses		11	6	27
		Percentage Correct		
1015 Q1 – Loop	MC	36%	83%	73%
1015 Q2 – Planning	MC	100%	100%	92%
1015 Q3 - Structured Program Characteristics	Essay	0%	0%	8%
1015 Q4 - Benefits of Structures	Essay	0%	17%	4%
CIS 1015 Average		34%	50%	44%
1030 Q1 - Object of a Class	MC	27%	67%	69%
1030 Q2 - Value of X	MC	18%	17%	19%
1030 Q3 - Variable Definition	Essay	18%	0%	4%
1030 Q4 - Types of Control Structures	Essay	18%	33%	35%
CIS 1030 Average		20%	29%	32%
2050 Q1 - Type of Computer Network	MC	64%	33%	50%
2050 Q2 - Unit of Clock Speed	MC	36%	83%	69%
2050 Q3 - Microchip on Motherboard	MC	64%	17%	54%
2050 Q4 - Troubleshooting Process	Essay	18%	50%	38%
2050 Q5 - Dual and Quad Channel Memory	Essay	0%	33%	42%
CIS 2050 Average		36%	43%	51%
2980 Q1 – Normalization	MC	91%	100%	88%
2980 Q2 - Many-to-many Relationship	MC	27%	50%	65%
2980 Q3 - Types of Relationships	Essay	18%	50%	54%
2980 Q4 – ERDs	Essay	9%	17%	50%
CIS 2980 Average		36%	54%	64%
3020 Q1 – Link	MC	18%	33%	27%
3020 Q2 - Inline Images Attribute	MC	27%	17%	31%
3020 Q3 - Selected Option Button	MC	9%	17%	19%
3020 Q4 - Connecting to External	Essay	0%	0%	0%

CSS File				
3020 Q5 - Creating Rows and Columns	Essay	0%	0%	0%
CIS 3020 Average		11%	13%	15%
3900 Q1 - SDLC Analysis Phase	MC	9%	67%	35%
3900 Q2 - Dynamic Schedule	MC	55%	50%	50%
3900 Q3 - Phases of SDLC	Essay	0%	0%	8%
3900 Q4 - Functional Model Elements	Essay	9%	0%	19%
CIS 3900 Average		18%	29%	28%
4600 Q1 - Agile Software Development	MC	64%	0%	42%
4600 Q2 - Scrum Phases	MC	45%	50%	19%
4600 Q3 - 2nd Value of Agile Manifesto	Essay	0%	0%	23%
4600 Q4 - SCRUM framework	Essay	0%	0%	31%
CIS 4600 Average		27%	13%	29%

For the 2021-2022 academic cycle, some areas of concern remained that were also identified in the 2019-2020 academic cycle.

As with the 2019-2020 academic cycle, the expectation for the CIS 1015, CIS 1030, CIS 2050, CIS 2980, and CIS 3020 responses was lower responses from the CIS 1015 test group followed by increased scores at the midpoint. For the final point, the expectation was maintenance or further increase from the midpoint. All five areas saw increases from the baseline to the midpoint. However, one of the five groups (CIS 1015) saw a decrease from the midpoint to the final measurement.

The expectation for the CIS 3900 and CIS 4600 responses was for lower accurate responses from the baseline and midpoint groups with increased accurate responses for the final measurement. In contrast to the 2019-2020 academic cycle, only CIS 4600 increased for the final measurement and it only increased slightly as compared to the CIS 1015 group.

The results indicated the most difficulties with Essentials of Network Design and Hardware concepts, Web Page Development concepts, Advanced Systems Development concepts, and Systems Analysis & Design concept. While changes were made to the instrument for the Web Page Development concepts, students still struggled with this section of the exam.

The 2021-2022 percentages were far from the ideal target and generally trended in the wrong direction. Four of the areas decreased, two remained the same, and only one increased as compared to the 2019-2020 cycle.

Assessment Cycle 2022 – 2023

These results could reflect continued effects by COVID. Students will have spent a couple years or more dealing with the side effects of the pandemic. An additional lack of effort on many students' part may have contributed to the results as well.

Additionally, the sample group was smaller than expected. While faculty were encouraged to attempt different ways to increase participation, some faculty members failed to get a sufficient number of their students to participate.

Decision: In 2021-2022, the target was not met. Based on the analysis of the 2021-2022 results, the faculty will implement the following changes in 2022-2023 to drive the cycle of improvement. While faculty were to make individual efforts to increase participation and ensure academic integrity during the last cycle, the lower number of responses and continued lack of effort necessitate a change in how we are approaching these exams.

Additionally, changes to the curriculum will affect these results as well as require changes to the survey itself. Effective Fall 2022, CIS 2050 – Essentials of Network Design and Hardware will be split into two classes (CIS 2080 and CIS 2090) to help with student success and progression in the program. For students taking these classes, their knowledge in this area should increase due to longer length of time taken to cover the materials. However, not all students will be required to take these classes. The Application Development concentration, as well as the new Information Systems Management concentration, do not require CIS 2050 any longer which means it is no longer a core CIS area for all students.

The topics covered in CIS 1015 have changed and will continue to be enhanced. Students in this class will prepare to take the CompTIA IT Fundamentals exam which covers basic material from across the CIS field, including networking and hardware. Thus, the faculty will have new questions for this area on the next iteration of the exam.

Measure 5.2 (Direct – CIS 4600 Advanced Systems Development Project)

Each year, students work in groups to design and create an application related to a real-world project or problem. Students initially design the system in CIS 3900 – Systems Analysis and Development. Students implement the design in CIS 4600 – Advanced Systems Development. The faculty member of the course grades the project based on an existing rubric. Seventy percent (70%) of the students will score 80% or better.

Findings:

AC 2017 – 2018: CIS 4600 target met. 84% of students achieved 80% or higher.
AC 2019 – 2020: CIS 4600 target met. 100% of students achieved 80% or higher.
AC 2021 – 2022: CIS 4600 target met. 100% of students achieved 80% or higher.

Analysis. In 2019-2020, the target was <u>met</u>.

Students completed the project every academic cycle although this student learning outcome is only measured every other academic cycle. In this academic cycle, every student met the 80% criteria. This increase from the 2017 – 2018 academic cycle can be attributed to changes made by the instructor to increase the students' competency in key areas, particularly in the presentation area.

Analysis also occurred of individual items within the overall score. As students completed the final project, they completed sprints as part of the agile (scrum) systems development methodology. The scores on each sprint decreased followed by an increase and subsequent decreases as shown in the table below. These scores are individual as each student must complete a specific task for each sprint.

Table 21: 2019-2020 CIS 4600 Sprint Scores

Sprint – January 29th	100% Average
Sprint – February 12th	92% Average
Sprint – February 26th	97% Average
Sprint – March 12th	97% Average
Sprint – March 26th	94% Average
Sprint – April 16th	94% Average

Additionally, Computer Information Systems faculty analyzed individual components of the project. The table below shows the individual score components.

Table 22: 2019-2020 CIS 4600 Individual Score Components

Project Presentation	100% Average
Final Report Submission	100% Average
Project Functionality	100% Average
User Manual	97% Average
Project Personal Narrative	97% Average
Peer Evaluation	98% Average

Every component of the project saw an increase from the 2017-2018 academic cycle. While some modifications occurred due to the COVID-19 pandemic, much of the project expectations remained the same. For example, the face-to-face CIS 4600 class missed two opportunities to practice their presentations, including Research Day presentation that they could have used on their resumes and for practice. All areas saw increases of 5% to 12%.

At least some of the increases should be attributed to changes in the CIS 3900 and CIS 4600 classes as well as the overall program. Students have struggled with nervousness in presentations. As part of their preparation for their final project presentations, students now complete multiple presentations in the class. Additionally, the CIS faculty have incorporated more presentations in other parts of the CIS curriculum to enhance the students' presentation skills.

Assessment Cycle 2022 – 2023

Another area that increased was the peer evaluation score. In a change from the previous academic cycle, the instructor of the class chose the team members to ensure the team had a diverse range of technical backgrounds based on their various concentrations. The project also now requires components from all concentrations. This change likely led to a more cohesive group where at least one team member should have knowledge regarding a particular area of the project. This change may have led to the increase in the peer evaluation score.

Based on the analysis of the 2019-2020 results, the faculty implemented the following changes in 2020-2021 and 2021-2022 to drive the cycle of improvement. First, the instructor kept the changes requiring additional presentations, balancing of technical strengths on teams, and incorporating additional technical areas in the final project. These changes seemed to have increased the performance of the students on the final project. Secondly, the instructor monitored these results to ensure that changes made in the other classes are still supporting the final project and that students are still performing at the necessary levels. Finally, one of the two lowest ratings on the final project was the production of a user guide. While still high at 97%, the CIS faculty decided the creation of user guides or similar documents in other classes preceding these capstone classes was feasible. These guides have been implemented, or will be implemented, in CIS 3300, CIS 3410, CIS 3970, CIS 4000, and CIS 4060.

As a result of these changes, in 2021-2022, the target was <u>met</u>.

Once again, analysis occurred within the overall score. As students completed, the final project, they completed sprints as part of the agile (scrum) systems development methodology. The scores on each sprint decreased followed by an increase. These scores are individual as each student must complete a specific task for each sprint.

Table 23: 2021-2022 CIS 4600 Sprint Scores

Sprint – January 31st	100% Average
Sprint – February 14th	100% Average
Sprint – March 7th	96% Average
Sprint – March 21st	96% Average
Sprint – April 11th	100% Average
Sprint – April 25th	100% Average

Additionally, the Computer Information Systems faculty analyzed individual components of the project. The table below shows the individual score components.

Table 24: 2021-2022 CIS 4600 Individual Score Components

Project Presentation	89% Average
Final Report Submission	96% Average
Project Functionality	100% Average
User Manual	89% Average
Project Personal Narrative	100% Average
Peer Evaluation	97% Average

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The aforementioned changes impacted the students' scores on the sprints positively. Each sprint was either than the corresponding sprint on the last cycle measurement or within one percentage point of it. Unfortunately, on the individual components of the project, four of the six components decreased from the previous cycle. The functionality component was the same while the personal narrative component increased.

The other four components decreased with the project presentation and the user manual decreasing by the largest amount. The project presentation may have been affected by a change in the modalities offered for the CIS 3900 and CIS 4600 classes. In most academic years, these classes are offered in a face-to-face environment as well as an online environment. Due to an agreement with Fort Polk, these two classes were offered at night this year and neither had enough enrollment to be offered. Thus, all students were enrolled in an online section of the classes. While the CIS faculty have incorporated more presentations in their classes, this difference meant the students had fewer practice presentations within a face-to-face environment.

On the user manual, several instructors, but not all instructors, implemented it in the planned classes in the 2021-2022 academic year. Thus, some students in certain concentrations missed the additional practice of creating user guides. Additionally, depending on when students took these other classes, they might have missed the new implementation of these user guides.

Decision: In 2021-2022, the target was <u>met</u>. Based on the analysis of the 2021-2022 results, the faculty will implement the following changes in 2022-2023 to drive the cycle of improvement. First, the rotation of the CIS 3900 and CIS 4600 classes will move back to offering an online section and a face-to-face section offered during the day. This change should help with increasing the averages in some of the areas that decreased, such as the presentation area. This return to face-to-face sections will also allow the instructor to have students conduct practice presentations once again. Additionally, on the user manual, the faculty will ensure that a user manual is present in classes in each of the available concentrations.

Comprehensive Summary of Key evidence of improvement based on the analysis of results.

The following reflects all the changes implemented to drive the continuous process of seeking improvement in AC 2022-2023. These changes are based on the knowledge gained through the analysis of the AC 2020-2021 results.

Data on the students learning outcomes was collected, analyzed, and reported for the BS in Computer Information Systems. Instruments used included the complete and partial SoBUSKE, the ETS exam, written and oral projects from students as individuals and as teams, case studies, simulations, and other quizzes or exams.

Five measures were taken for SLO#1 Effective Communication. Of these, <u>two measures met the acceptable target with both also meeting the ideal target. Three measures did not meet the target</u>. Future actions to assist in meeting the targets include incorporating COMM1010 back into the CIS curriculum, attempting to lower non-participation on some activities, collaboratively creating a rubric for the CIS 1015 final reports, and collaboratively creating a rubric for the CIS 1015 face-to-face final group presentation.

For SLO#2, <u>one measure was partially met and the other measure was not met.</u> The

results for SLO#2 Integration of Knowledge were hard to compare to previous year given the change in students being analyzed. On the School of Business Knowledge Exam given in the senior year, maintenance or increases occurred in every subject area except one. However, this comparison is for CIS students in 2022-2023 to all students in 2020-2021. Future changes made due to the analysis of the results include more thoroughly incorporating the use of Excel into the publisher application used in statistics, reviewing the distribution of topics between FIN 3090 and FIN 4200, increasing efforts to lower non-participation, and attempting strategies to increase effort on the senior year School of Business knowledge exam.

As with the previous AC, SLO#3 had more positive results. Both measures for SLO#3 met the acceptable target as well as the ideal target. Future efforts include the refinement of topics between FIN 3090 and FIN 4200, the maintenance of the XBRL technology and reinforcement of its use in FIN 3090, and the choice of Finance topics for the essays that are related to the future responsibilities of CIS graduates.

Performance for SLO #4 was also very positive. All three measures met the acceptable target, and all three measures met the ideal target. Future efforts to increase performance on this SLO include the possible inclusion of COMM1010 in the curriculum, strategies to lower non-participation and increase effort, and the creation of a specific section listing international business research databases and tools.

For SLO#5, one measure met the target while one measure did not meet the target. On Measurement 5.2, students decreased from their high performance in the 2019-2020 academic cycle, but still easily met the target. These results in the capstone class showed students knewhow to create information systems projects and go through the systems developmentprocess.

Unfortunately, the CIS unit did not meet the target for measurement 5.1 which indicates students still have issues with supporting their abilities with the underlying knowledge and theory. As with the 2019-2020 academic cycle, this contrast fits with what the faculty often find in the classroom where students can complete an assignment but struggle explaining why and how. Unfortunately, changes made since the 2019-2020 academic cycle do not seem to have helped. Scores in almost every subject area decreased fromthe 2019-2020 academic cycle or stayed the same.

However, we can point to other changes within the program as evidence ofcontinuous improvement. We continued to make changes to the curriculum based onassessment, advisory council feedback, and student needs. In 2021-2022, the unit continued implementation of a new MS in Computer Information Systems with the first graduates in Spring 2022. The unit also submitted several changes to help ease the path of students to the BS in ComputerInformation Systems degree. First, the CIS 2050 class was split into CIS 2080 and CIS 2090 to allow for more time for students to study for and complete the CompTIA A+ certification. Additionally, curricular changes were made to the existing certifications to allow for more flexibility of classes. In the Application Development concentration, CIS 2050 was removed as a requirement given the difficulty those students were having with the material and the lesser need those students have for that material. Additionally, the Web Development concentration was removed in 2022-2023 and a new concentration in Information Systems Management was added instead. Finally, students in the CIS 1015 class started taking the CompTIA IT Fundamentals exam to expose them to certification

testing earlier in their academic career. While it was not a certification exam that solely determined the students' passage or failure in the class, it helped students get into the mindset and see the testing environment for later certifications which are higher stakes.

Plan of Action moving forward.

Based on analysis of the 2022-2023 results (AOL#1-4) and the 2021-2022 results (AOL#5), the School of Business has identified several strategies for improving learning outcomes.

The possible inclusion of COMM1010 (if approved by the School of Business Faculty and the University Curriculum Review Committee) could provide increased performances in multiple areas. Its inclusion would also allow other classes to adjust the topics covered in their classes, leading to increased performance in other areas.

One particular focus is the continuation of the creation of strategies to address non-participation and lack of effort in many of the activities. Some of the student learning outcome measurements are greatly affected by the lack of participation by students. While the faculty are trying to make decisions based on the available data, these decisions could be skewed due to the students who are not meaningfully participating.

Collaboration between faculty within the School of Business continues to be key. The CIS 1015 faculty members will work with the BUAD2200 faculty members to create rubrics for the oral and written components of the CIS 1015 final projects. Additionally, for all changes in classes where multiple faculty members teach the class, the faculty members will work together to ensure that the change is effective across all class sections.

The use of technology and external resources remain a constant need going forward. Faculty members will be incorporating the use of Excel for analysis in more classes, reinforcing the use of the XBRL technology, and creating sections within the learning management system to highlighter external business research databases and tools.

Efforts remain in providing professional development and feedback to the faculty regarding student learning outcomes and quality teaching. The Lunch and Learn program theSchool of Business remains a key area in which to accomplish this task. In 2022-2023, almost monthly events were held related to varying topics. In most of these events for 2022-2023, the topics were a specific student learning outcome, its measurements, and ways to affect these measurements. The discussion of the change in how we were measuring across the School of Business for each degree program and how to handle it for each measurement was also a key component of these luncheons. Finally, other topics were discussed, such as a presentation by Emily Perritt from Electronic and Continuing Education on the creation of accessible documents for use in class.

Faculty should remain interested in incorporating support for student learning outcomes due to a previous change in the merit sheet. In the 2020-2021 academic year, a new merit sheet was proposed and approved. The 2022-2023 academic year was the second year in which the faculty went through the evaluation process under this new merit sheet. This merit sheet includes an emphasis on key items that move

the School of Business in the direction outlined by our mission statement and vision. One key area where faculty members can receive points is "Demonstration of the incorporation of the outcomes of the SoB's assessment process of student learning expectations into the faculty member's course or courses that highlight either a new design, delivery method, revision, and/or overall improvement for the degree program curricula." Through the promotion of this area, the School of Business faculty hope to have more faculty members supporting the various student learning outcomes. We are also able to gather data about changes made in classes due to student learning outcomes even if those changes weren't part of the original plan.

Additionally, three strategic initiatives are included in the merit sheet. Two of these initiatives could have a direct impact on student learning. One of the initiatives is for faculty to undertake a Quality Matters review for their classes. Another initiative relates to a push for inclusion of teaching and non-teaching activities related to diversity, equity, and inclusion.

On SLO#5, the faculty will continue to brainstorm and review ways to increase the effort on the comprehensive exam to try to get a better feel of how our students' knowledge is progressing through the program. Additionally, the faculty will monitor how changes to our curriculum and classes affect the exam results. The exam will also be updated to reflect the changes that have occurred in the curriculum as it relates to CIS 1015 and CIS 2050.

On the capstone project, the faculty will monitor how changes in the curriculum are affecting student performance on the final project. Faculty will also ensure user guides are incorporated throughout all portions of the curriculum.

The CIS faculty has developed many initiatives to better serve our students. We have combined and split classes to assist students in moving through the BS in Computer Information Systems degree. We continue to discuss and experiment on the best ways for students to pass industry-based certifications.

One of the largest efforts that could affect the student learning outcome process is an effort undertaken called "Reimagining Our AOLs". For AACSB accreditation purposes, we use assurance of learning instead of student learning outcome. Additionally, while the title emphasizes assurance of learning, the discussions are about learning so it naturally involves curriculum discussion as well. This process began in 2022-2023 and will continue in 2023-2024. Through this process, the faculty members in Accounting, Business Administration, and Computer Information Systems met multiple times to discuss the soft skills and knowledge-specific skills of the graduate in their area.

Faculty members used these lists of skills to form overall goals for the program. Either during Summer 2023 or at beginning of Fall 2023, faculty members will vote on these new goals. Then during 2023-2024, faculty members will continue meeting to refine specific objectives, measurements, and targets for these goals. Thus far, the good news is that the proposed goals align with the student learning outcome goals put forth by the University of Louisiana System.

As faculty members were asked to come into these discussions as if the previous goals and their supporting objectives and measurements did not exist, some of the goals will

be changed from the goals that the School of Business has been using for several years. Once the goals, measurements, and objectives have been refined, discussions will occur with the appropriate personnel at the University about the change and the unit will move forward in implementing these changes. Another component of the discussion will be about skills or knowledge that did not get specifically measured in a student learning outcome but that the faculty members thought were important. The faculty members will analyze these skills and knowledge to ensure they are being taught in the curriculum as well.

Regardless of what occurs with the "Reimagining" process, some changes will be occurring with measurements within the goals. Due to analysis of the usefulness of UNIV1000 data as well as the splitting of the analysis between the degree programs, three measurements within the report are no longer applicable to the BS in Computer Information Systems and will be deleted after this year.

In conclusion, the School of Business and its faculty strive to improve all aspects of student learning. Measures of student learning outcomes are assessed each assessment cycle and compared to previous results to determine progress. The School of Business has a collegial environment and faculty often work together to ensure classes are blending and that appropriate and successful strategies are shared with other faculty members.