

BSIS Program Learning Outcomes Report Summary 2022

The following table summarizes the assessment of PLOs for the BSIS program for assessment cycle (2021-22). This process is conducted regularly as part of the annual learning results assessments, which measure two or three PLOs for each program each year. This summary report is to be submitted to the EEC upon its completion.

Program	Bachelor of Science in Information Systems
Assessment Period	Summer 1, 2021 to Spring 2, 2022
Program Learning Outcomes (PLOs)	<p>PLO 2: Develop professional competencies in information systems, including an understanding of the various components of the field.</p> <p>PLO 6: Demonstrate effective oral communication skills.</p>
Closing the loop (from the last time these same PLOs were assessed)	<p>Previous Assessment Cycle: This is the first time PLOs 2 and 6 have been assessed.</p>
Standards of Success	<p>PLO 2: Artifact Proficiency Standard: Each artifact is considered to have met the proficiency standard if three or more of the five criteria of measurement achieve at least a satisfactory or higher rating according to the artifact assessment rubric.</p> <p style="padding-left: 40px;">Aggregate Achievement Standard: Eighty percent of artifacts will meet the 'Satisfactory' level as measured by the 'Direct Assessment' rubrics developed for each assessment.</p> <p>PLO 6: Artifact Proficiency Standard: Each artifact is considered to have met the proficiency standard if two or more of the three categories of measurement achieve at least a satisfactory or higher rating according to the artifact assessment rubric.</p> <p style="padding-left: 40px;">Aggregate Achievement Standard: Eighty percent of artifacts will meet the 'Satisfactory' level as measured by the 'Direct Assessment' rubrics developed for each assessment.</p>
Evidence	<p>PLO 2: The artifact used for assessment was the Real-World Application Part 3 in ISYS 490</p> <p>PLO 6: The artifact used for assessment was the Part 4-New Network Proposal Presentation in ISYS 320</p>
Assessment Tool	<p>PLO 2: A standardized rubric was created using the assignment rubric as a template. The assessors developed the rubric after creating a draft and then participating in an interrater reliability exercise. The sample size was 8 students.</p> <p>PLO 6: A standardized rubric was created using the assignment rubric as a template. The assessors developed the rubric after creating a draft and then participating in an interrater reliability exercise. The sample size was 8 students.</p>

Assessors	PLO 2: George Vicari, Cathy LeDuc PLO 6: George Vicari, Cathy LeDuc
Results	<p>PLO 2: Of the eight artifacts, four passed and four failed. The success rate was 50%, failing to meet the aggregate achievement standard of 80%.</p> <p>PLO 6: Of the eight artifacts, five passed and three failed. The success rate was 63%, failing to meet the aggregate achievement standard of 80%.</p>
Discussion of Results	<p>PLO 2:</p> <ul style="list-style-type: none"> ● Research performed very poorly. The remaining criteria performed marginally better with the strongest results coming in the business case and context/purpose criteria. As the four-part assignment for this course is currently written, the Part 3 assignment is the creation of a business case based on research and analysis conducted in Part 2 of the assignment. Students are provided a template to develop the business case. The Part 3 results may reflect the fact that the assignment instructions and template do not sufficiently define requirements to incorporate supporting research and analysis to support the business case topics and conclusions.as measured in the assignment rubric. ● The results also reflect the challenge of using one part of a multi-part assignment in the PLO assessment. The assignment in this course is written to meet the course outcomes holistically. If the assignment is not specifically designed to meet the course outcome as a standalone, it is difficult to meet the PLO. <p>PLO 6:</p> <ul style="list-style-type: none"> ● Student performance on this PLO does not reveal any significant, consistent patterns. The assignment reviewed is Part 4 of a four-part group assignment that scaffolds to a network communication proposal. Students generally submitted a presentation that represented their individual contribution to a group report. ● The nature of the group project does not align well to rating individual performance or for providing meaningful feedback to students for their presentation. ● The assignment instructions reference submission of a VoiceThread presentation and do not specify a visual presentation. The instructions also do not set expectations for team member contribution, so in some projects it is possible a student would participate in the earlier parts of the project without an individual Part 4 submission, skewing the assessment results. ● The length and difficulty of content presented in each student’s presentation varies significantly depending on the division of responsibilities for the report components. Some sections are quite technical and difficult, while others require no technical discussion or knowledge. This creates an imbalance in ratings between students in relation to rating categories such as delivery, approach, and language. ● The concern is that this might unfairly penalize students unfamiliar with significant portions of the presentation content. Indeed, it is a problem with the current group assignment that some students will earn a passing grade in the course while gaining very little exposure to the course outcomes.
Proposed Changes	<p>PLO 2:</p> <ul style="list-style-type: none"> ● Revise assignment instructions for Part 3 as well as the other parts of the assignment to require a more robust submission that demonstrates students’

	<p>overall learning in the program</p> <ul style="list-style-type: none"> • Specify research, analysis and the development of reasoned conclusions • Eliminate or revise word/page counts • Simplify and revise the templates and tools that students use (for example, instead of a complex Excel template, use a basic Word template for each distinct assignment submission) • Beef up the assignment requirements for the business case to be more comprehensive of the overall IS program (for example, consider scalability, storage, security, implementation plan, etc) • Add specific sections such as references, analysis, conclusion section in each of the templates to reinforce these requirements • Consider a persuasive business case exemplar • Closely align assignment instructions and the grading rubric • Consider including the full four-part assignment when all parts are needed to accurately assess the PLO <p>PLO 6:</p> <ul style="list-style-type: none"> • Change four-part assignment from group project to individual assignments; each student conducts research, develops a report, plus creates and records a presentation on the proposal developed in Parts 1 through 3. • Ensure direct alignment between the assignment requirements and associated rubric criteria, and PLO 6. • Establish clear expectation the presentation is to include visual and auditory presentation • Set clear expectations for length and content of the presentation • Consider including the full four-part assignment when all parts are needed to accurately assess the PLO. • Refine an assignment in which students must demonstrate the ability to communicate and collaborate in team environments in a professional manner to achieve CO 6.
<p>Rationale for Proposed Changes</p>	<p>PLO 2:</p> <ul style="list-style-type: none"> • The rubric and instructions are minimally aligned. The instructions are almost exclusively related to the development of the business case with little emphasis on the requirements for research, analysis, and conclusions that are supported by evidence within the business case. Minor revisions to ensure student submissions include a comprehensive perspective of information systems in their projects, and that the submissions demonstrate thorough research and analysis, plus the direct alignment between the assignment instructions, rubric, PLO should substantially improve the performance of this PLO. <p>PLO 6:</p> <ul style="list-style-type: none"> • The raters discussed options to retain the group project for Parts 1, 2, and 3 while requiring individual assignments for Part 4. Neither rater believed the current approach of dividing the presentation among group members allows for adequate student opportunity to create and deliver a meaningful presentation. The raters considered an approach whereby the group would conduct research and create a collaborative report, and then each student would use the full report to create and deliver an individual presentation. This was dismissed given that students would be required to create and deliver a presentation that exceeds the individual student's scope of research and report contribution. The concern is that this might unfairly

	<p>penalize students unfamiliar with significant portions of the presentation content. Indeed, it is a problem with the current group assignment that some students will earn a passing grade in the course while gaining very little exposure to the course outcomes.</p> <ul style="list-style-type: none"> ● The raters therefore determined that the best alternative to adequately assess PLO 6 and address other deficiencies or potential deficiencies in student achievement of the course outcomes would be to consider changing from group to individual assignment. ● While not related to PLO 6, an additional detriment of the group project format is that it also fails to meet the ethical and Biblical worldview outcomes. Changing to an individual assignment would support better opportunities to ensure each student is participating in this important outcome in addition to the aforementioned presentation outcome.
Financial Resources Required	The proposed changes are focused on a minor revision of the mastery assignment expectations and instructions; therefore, the costs are minimal.
Annual Learning Report for (program) Approved	Approved by the Educational Effectiveness Committee (EEC) on April 4, 2023
Follow Up (Closing the Loop for PLOs assessed in previous assessment cycle)	<p>2020 Annual Report</p> <p>PLOs 1 and 3 were assessed in 2020 with 38% and 64% success rates. Recommended changes related to PLO 1 were partially addressed in the revised curriculum map and PLO revisions. PLO 1 mastery will now be assessed in ISYS 465 using the Ethical Implications of Using Technology assignment. PLO 3 was edited so there is now one PLO focused on written communication (#3) and one PLO focused on oral communication (#6). The written component is assessed in ISYS 420's Enterprise Architecture Proposal, and oral communication is assessed in ISYS 320's New Network Proposal Presentation. These courses and assignments are better matches for the refined PLOs. However, the ISYS 320 assignment still needs substantial revisions to allow it to adequately measure the new PLO on oral communication skills.</p>