

## Program-Level Assessment: Annual Report

Program Name (no acronyms): Computer Information Systems

Department:

Degree or Certificate Level: BS Program

College/School: Professional Studies

Date (Month/Year): July 2023

Assessment Contact: John Buerck

In what year was the data upon which this report is based collected? 2022-20223

In what year was the program's assessment plan most recently reviewed/updated? 2023

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? No

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.): N/A

### 1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

LO 3 = Communicate effectively with a range of audiences about technical information.

LO4 = Make informed judgments in computing practices based on legal and ethical principles.

### 2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

#### LO3

CIS1375 – Final Project

CIS2300 – Final Project

CIS2850 – Final Project

CIS4100 – Final Project

CIS4800 – Final Project

#### LO4

CIS1375 – Final Project

CIS2300 – Final Project

CIS3150 – Final Project

CIS4100 – Final Project

CIS4800 – Final Project

### 3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

Instructors have outcomes set up and added to their artifact rubric vis Canvas outcomes. At the end of their courses, a Canvas Outcomes report was run to collect data about student performance and artifacts used to assess learning outcomes. Data was used to analyze and make changes as needed to assessment of learning outcomes.

### 4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

The Canvas outcomes reported that many of the artifacts had properly assessed student learning outcomes for their specific courses, but some minor adjustments might be needed; which will be explained further in section 5 of this report. Most instructors used final projects as their assessment tool and felt it was appropriate for the type of students in these classes.

More specifically, we found the following for each LO:

#### LO 3 – 139 total artifacts assessed

- Meets Standard - Student shows ability to demonstration knowledge of – 70 students met this level
- Approaches Standard - Student shows ability to demonstration knowledge of – 22 students met this level
- Does Not Meet Standard - Student does *not* demonstrate knowledge of – 6 students met this level
- Did not report = 41

#### LO 4 – 51 total artifacts assessed

- Meets Standard - Student shows ability to demonstration knowledge – 32 students met this level
- Approaches Standard - Student shows ability to demonstration knowledge of – 2 students met this level
- Does Not Meet Standard - Student does *not* demonstrate knowledge of – 0 students met this level
- Did not report = 17

**\*\*All courses were taught online, so there is no difference in teaching modality to note\*\***

### 5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

As discussed in section 4, the data has largely supported that the learning outcomes have been supported by the artifacts chosen. With this said, faculty are not all reporting assessment data in Canvas. This has prompted administration to reflect with all faculty directors in SPS to come up with a school wide plan moving forward.

Solution summary = Dr. Matt Grawitch is in the process of developing a school wide assessment tool that will be implemented in fall of 2023. This new assessment tool will more strictly monitored by program directors.

### 6. Closing the Loop: Dissemination and Use of Current Assessment Findings

A. When and how did your program faculty share and discuss the results and findings from this cycle of assessment?

An ad-hoc discussion around course delivery and evaluation was had with selected CIS adjunct faculty. As an outcome, all agreed that the program is delivering an applied and up-to-date program of study to the students.

It was, however, stressed that all faculty will need to report tangible data this coming year to support our discussion.

**B.** How specifically have you decided to use these findings to improve teaching and learning in your program? For example, perhaps you've initiated one or more of the following:

Changes to the Curriculum or Pedagogies

- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites

- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan

- Student learning outcomes
- Artifacts of student learning
- Evaluation process

- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of these findings.

At this time, there are no changes to the program.

If no changes are being made, please explain why.

The CIS BS program is scheduled to go through a program review starting in the fall of 2023.

## 7. Closing the Loop: Review of Previous Assessment Findings and Changes

**A.** What is at least one change your program has implemented in recent years as a result of previous assessment data?

Over the past two years, Dr. Joe Lyons has stepped in as the Interim Director of the CIS program as I was moved to Interim Dean in the school. Because of this interim role, no real changes were implemented.

**B.** How has the change/have these changes identified in 7A been assessed?

Please see the response to 7A.

**C.** What were the findings of the assessment?


N/A

**D.** How do you plan to (continue to) use this information moving forward?

New Assessment / Data Collection Method: Dr. Matt Grawitch is in the process of developing a school wide assessment tool that will be implemented in fall of 2023. This new assessment tool will more strictly monitored by program directors.

**IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted/appended into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document. Thank you.**

## CIS1375 Final Project Rubric

CIS1300 Final Project Rubric				🔍 🗑
You've already rated students with this rubric. Any major changes could affect their assessment results.				
Criteria	Ratings			Pts
HTML tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Header bar tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Title tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Body tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Paragraph tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Single-spaced return tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Horizontal rule tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Heading tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Bold text tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Italic text tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
List tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Link tag	2 pts Excellent Tag used correctly.	1 pts Needs Improvement Tag used incorrectly.	0 pts Below Expectations Missing.	2 pts
Colors	4 pts Excellent Two or more additional text or background colors used.	2 pts Needs Improvement One additional text or background color used.	0 pts Below Expectations. Black text only.	4 pts
Media	4 pts Excellent Relevant media properly embedded.	2 pts Needs Improvement Media has no relevance to topic or has not been properly embedded.	0 pts Below Expectations No media.	4 pts
Theme	10 pts Excellent HTML document submitted with a coherent theme, relevant to wisdom or a topic covered in this class.	5 pts Needs Improvement HTML document lacks a coherent theme relevant to coursework.	0 pts Below Expectations Incorrect document submitted.	10 pts
Polished product	8 pts Excellent Polished product is free of grammatical, spelling, and typographical errors.	4 pts Needs Improvement Typographical errors are distracting.	0 pts Below Expectations Multiple stylistic errors.	8 pts
 CIS SLO 1 An ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution. threshold: 5.0 pts	5 pts Meets Standard - Considers the various options to utilize in solving a problem, and choose the most appropriate one and justify its selection.	3 pts Approaches Standard - Selects an appropriate solution to a problem, verify its correctness and evaluate its effectiveness.	0 pts Does Not Meet Standard - Considers the various options to utilize in solving a problem, and choose the most appropriate one and justify its selection.	--
Total Points: 50				

## CIS2300 Final Project Rubric

**CIS2300 Final Project Rubric (1) (1)**

You've already rated students with this rubric. Any major changes could affect their assessment results.



Criteria	Ratings			Pts
Titles and Headings	5 to >4.0 pts Excellent Appropriate titles created, merged and centered. Non-default font color applied to all titles and headings.	4 to >2.0 pts Needs Improvement Most title/heading edits made.	2 to >0 pts Below Expectations Few edits made to titles and headings.	5 pts
Cell Formatting	10 to >9.0 pts Excellent Non-standard font and font size used throughout. Appropriate number/text formatting applied. Fill colors applied to designated cells.	9 to >4.0 pts Needs Improvement Most cell formatting applied as directed.	4 to >0 pts Below Expectations Few cells formatted as directed.	10 pts
Part 1 Formulas	10 to >9.0 pts Excellent Correct formulas entered, as directed.	9 to >4.0 pts Needs Improvement Most formulas entered correctly.	4 to >0 pts Below Expectations Few formulas entered correctly.	10 pts
Solver	10 to >9.0 pts Excellent Objective cell, changing cells, and constraints correctly entered into Solver. Answer Report sheet created.	9 to >4.0 pts Needs Improvement Most Solver values correctly entered.	4 to >0 pts Below Expectations Few Solver values correctly entered.	10 pts
Part 1 Analysis	15 to >14.0 pts Excellent Clear, detailed description of the problem and recommended solution, written in complete sentences using proper English grammar and spelling.	14 to >7.0 pts Needs Improvement Analysis is missing key elements or lacks clarity.	7 to >0 pts Below Expectations Insufficient problem analysis.	15 pts
Part 2 Formulas	10 to >9.0 pts Excellent Totals and averages correctly calculated and labeled. Conditional formatting rules (data bars or color scales) correctly applied.	9 to >4.0 pts Needs Improvement Totals and/or averages calculated.	4 to >0 pts Below Expectations Formulas are incorrect or missing.	10 pts
Charts	15 to >14.0 pts Excellent Sparkline, pie chart, and clustered column chart created with appropriate data labels, legends, and titles.	14 to >7.0 pts Needs Improvement Most charts created correctly with appropriate labels, legends, and titles.	7 to >0 pts Below Expectations Charts are missing or incomplete.	15 pts
Part 2 Analysis	15 to >14.0 pts Excellent Determination of which store should be closed is clearly written in complete sentences, using proper English grammar and spelling, and supported by the data. Additional data needed for further analysis is explained.	14 to >7.0 pts Needs Improvement Decision is indicated but the analysis lacks depth or clarity.	7 to >0 pts Below Expectations Insufficient problem analysis.	15 pts
Finishing Touches	10 to >9.0 pts Excellent AutoFit applied to columns. Cover sheet provided with student name, course name, and date. Image inserted onto cover sheet. All sheets named appropriately with sheet tabs colored. Workbook marked Final.	9 to >4.0 pts Needs Improvement Most finishing touches applied.	4 to >0 pts Below Expectations Few finishing touches applied.	10 pts
CIS SLO 3 An ability to communicate effectively with a range of audiences about technical information. threshold: 5.0 pts	5 pts Meets Standard - Student communicates technical information clearly and consistent with the supporting material.	3 pts Approaches Standard - Student communicates technical information clearly and consistent, but without supporting material.	0 pts Does Not Meet Standard - Student does not communicate technical information clearly and consistent with the supporting material.	--
Total Points: 100				

**CIS2850 Final Exam**

This course uses the Pearson StatCrunch tool for the final exam.

**CIS3150 Final Project Rubric**

Criteria	Ratings			Pts
SFNO Process	10 to >9.0 pts Excellent Complete SFNO analysis applied to the case.	9 to >4.0 pts Needs Improvement SFNO analysis contains minor omissions or errors.	4 to >0 pts Below Expectations SFNO analysis contains major omissions or errors.	10 pts
Character Analysis	10 to >9.0 pts Excellent All 5 characters are examined using facts from the case.	9 to >4.0 pts Needs Improvement Examines most characters using facts from the case.	4 to >0 pts Below Expectations Examines few characters in detail.	10 pts
Summary	5 pts Excellent Summary clearly explains student opinion of the outcome based on facts from the case.	2.5 pts Needs Improvement Summary is incomplete.	0 pts Below Expectations Summary is missing or inconsistent with the facts of the case.	5 pts
Clarity	5 pts Excellent Opinions and ideas clearly stated. No errors with writing style or mechanics.	2.5 pts Needs Improvement Ideas are clearly stated, but grammar, spelling, and/or punctuation errors are distracting.	0 pts Below Expectations Difficult to understand due to grammar, spelling, and/or writing style.	5 pts
Total Points: 30				

# CIS4100 Final Project Rubric

## Final Exam

This exam consists of 25 true false and multiple choice questions to test your comprehension of the material from the course.

# CIS4800 Final Project Rubric

## Capstone Project Paper Submission

**The Paper** - We have been building the Capstone Project Paper throughout weeks 2 - 7 and at this point it is just missing the last section called the **Executive Summary**.

- Write the **Executive Summary**. If you have not already done so and be sure to include it as the last section of your Report (before References).
- Look over your report and make sure you have included all the required sections.
- Submit your report in pdf or Microsoft Word format and clearly labeled with your name: `FirstName_LastName_Capstone_Report.pdf`.

The deadline for submission of your Paper is **Wednesday, May 10th at 11:59 am**.

Points 60  
Submitting a file upload

Due	For	Available from	Until
May 10	Everyone	-	-

Criteria		Ratings			Pts
Problem Statement	20 pts <b>Exemplary</b> Demonstrates the ability to build a persuasive and insightful problem statement, identifies target audience and/or beneficiaries.	15 pts <b>Proficient</b> Demonstrates adequate knowledge of the subject by building a comprehensive problem statement, identifies target audience and/or beneficiaries.	10 pts <b>Competent</b> Demonstrates some knowledge of the subject by building a problem statement that is superficial, identifies most of the target audience and/or beneficiaries.	5 pts <b>Novice</b> Demonstrates inadequate knowledge of the subject by building a problem that is general and vague, fails to identify target audience.	20 pts
Problem Analysis	20 pts <b>Exemplary</b> Demonstrates thorough analysis of the problem and possible solutions by examining pertinent sources from a variety of perspectives, applies knowledge of project management and computing skills related to the issue at hand, identifies a solution that is appropriate and insightful.	15 pts <b>Proficient</b> Submits a number of solutions that demonstrate an adequate understanding of the problem but fails to address key options, applies adequate knowledge of project management and computing skills related to the issue at hand, identifies a suitable solution that may need to be further developed.	10 pts <b>Competent</b> Presents information from pertinent sources providing a limited number of solutions, perspectives, and methodology, needs to further develop application of project management and computing skills related to the issue at hand, identifies a solution but fails to substantiate choice.	5 pts <b>Novice</b> Proposes a single solution that fails to address the problem statement and demonstrates little understanding of the topic, fails to demonstrate knowledge of project management and computing concepts related to the problem.	20 pts
Proposed Solution	20 pts <b>Exemplary</b> Identifies an interesting, distinct, and manageable solution based on proper analysis of the problem, demonstrates how the solution addresses a need in the community and/or relates to continuing professional development.	15 pts <b>Proficient</b> Identifies a distinct and viable solution that addresses the subject from a personal perspective, reflection needs to be encouraged to address how the solution meets community or personal needs.	10 pts <b>Competent</b> Identifies a solution that is either too narrow or too wide in scope and needs to be further developed, reflection needs to be encouraged to address how the solution meets community or personal needs.	5 pts <b>Novice</b> Fails to identify a topic and needs to further investigate further subject knowledge, reflection needs to be encouraged to address how the solution meets community or personal needs.	20 pts
CIS SD 1 An ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution. meets: 1.0 pt	5 pts <b>Meets Standard</b> - Considers the various options to utilize in solving a problem, and choose the most appropriate one and justify its selection.	3 pts <b>Approaches Standard</b> - Selects an appropriate solution to a problem, verify its correctness and evaluate its effectiveness.	0 pts <b>Does Not Meet Standard</b> - Considers the various options to utilize in solving a problem, and choose the most appropriate one and justify its selection.		--
CIS SD 2 An ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline. meets: 1.0 pt	5 pts <b>Meets Standard</b> - Student shows ability to apply all computing requirements to artifact given rubric requirements.	3 pts <b>Approaches Standard</b> - Student shows ability to apply some computing requirements to artifact, but not all, based on rubric requirements.	0 pts <b>Does Not Meet Standard</b> - Student does not show ability to apply computing requirements to artifact.		--
CIS SD 3 An ability to communicate effectively with a range of audiences about technical information. meets: 1.0 pt	5 pts <b>Meets Standard</b> - Student communicates technical information clearly and consistent with the supporting material.	3 pts <b>Approaches Standard</b> - Student communicates technical information clearly and consistent, but without supporting material.	0 pts <b>Does Not Meet Standard</b> - Student does not communicate technical information clearly and consistent with the supporting material.		--
CIS SD 4 An ability to make informed judgments in computing practice based on legal and ethical principles. meets: 1.0 pt	5 pts <b>Meets Standard</b> - Student can make informed judgments in ethical issues when issues are presented in a complex, multi-layered context.	3 pts <b>Approaches Standard</b> - Student can apply some ethical concepts to an ethical question and the application is accurate.	0 pts <b>Does Not Meet Standard</b> - Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.		--
CIS SD 5 An ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables. IABET 5 meets: 1.0 pt	5 pts <b>Meets Standard</b> - Focuses on the task and what needs to be done at all times. Other group members can count on this person.	3 pts <b>Approaches Standard</b> - Often lingers to, shares with, and supports the efforts of others, but sometimes does not contribute to the group as needed.	0 pts <b>Does Not Meet Standard</b> - Rarely provides useful ideas when participating in the group projects and/or online discussions.		--
Total Points: 60					