

Program-Level Assessment: Annual Report

Program Name (no acronyms): Cybersecurity Department: SPS Graduate Programs
Degree or Certificate Level: Master's of Science College/School: Professional Studies
Date (Month/Year): June/2021 Primary Assessment Contact: Kim Dondanville
In what year was the data upon which this report is based collected? 2021
In what year was the program's assessment plan most recently reviewed/updated? 2021

1. Student Learning Outcomes

Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please list the actual learning outcome statements and not just numbers, e.g., Outcomes 1 and 2.)

SLO 3: Graduates will be able to construct and implement networks and data management systems that protect intellectual property using cybersecurity principles.

SLO 4: Graduates will be able to apply information security principles to analyze, detect and mitigate vulnerabilities and intrusions.

2. Assessment Methods: Artifacts of Student Learning

Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please identify the course(s) in which these artifacts were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

Data from individual students and students completing the master's research project (CYBR 5963)

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.

Assessment was conducted by the program director.

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)?

Results indicated that, in its current form, students were not meeting SLO 3. Additionally, final Master's Research Projects (MRPs) were quite variable in terms of their quality, depth, and breadth. Finally, SLO 4 was deemed to be insufficient in its current form should be slightly revised to focus on the important preventing, rather than just mitigating, intrusions.

5. Findings: Interpretations & Conclusions

What have you learned from these results? What does the data tell you?

The results indicate that the program is not truly designed to meet SLO 3. As such a more appropriate SLO should be implemented.

The results further indicate that greater standardization is needed for the MRPs.

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

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

I have discussed these results with multiple faculty within the school and with the only existing faculty member who teaches in the program.

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.

SLO 3 is changing to: Graduates will be able to apply cybersecurity-relevant network and data management systems principles to protect various assets.

SLO 4 is changing to: Graduates will be able to apply information security principles to analyze, detect and mitigate vulnerabilities and prevent intrusions.

Additionally, formal templates are being constructed for the MRP process, and we are in search of new adjunct faculty to teach and redesign courses in the program.

Finally, a revised curricular map has been constructed.

If no changes are being made, please explain why.

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 assessment data?

I cannot say as I have only recently taken over the administration of the program.

B. How has this change/have these changes been assessed?

Not applicable.

C. What were the findings of the assessment?

N.A.

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

N.A.

IMPORTANT: Please submit any assessment tools (e.g., rubrics) with this report.