SAINT LOUIS UNIVERSITY.

# Program-Level Assessment: Annual Report

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| Program: Software Engineering | Department: Computer Science |
| Degree or Certificate Level: Master of Science | College/School: Arts and Sciences |
| Date (Month/Year): October 15, 2020 | Primary Assessment Contact: Jacob Sukhodolsky |
| In what year was the data upon which this report is based collected? 2019 - 2020 | |
| In what year was the program's assessment plan most recently reviewed/updated? 2020 | |

## 1. Student Learning Outcomes
Which of the program's student learning outcomes were assessed in this annual assessment cycle?

Our goal was to assess the Program Learning outcome on implementation. In particular:
Graduates of the program will have an ability to:
- MS-SE: Design, implement, evaluate and test a complex software system that meets a given set of computing requirements.

## 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.

Our plan was to formalize rubrics in the fall, and assess these in CSCI 2100, CSCI 3300, and CSCI 5030. Artifacts were planned to include a mix of assignments and projects, appropriate to each course. Unfortunately, our program has been unable to assess our programs. Two major factors contributed to that. In the Fall 2019, Dr. David Letscher, who was our Assessment committee Chair, had to step down for health reasons. During Spring 2020, we all became busy teaching our courses on-line because of COVID. As a result, our assessment in classes did not happen as planned either semester.

In previous years, our department has established clear program and course learning outcomes. We have general assessment plans for all our degrees, but the plans have not been operationalized. This year we are refining our rubrics and schedule, so that we can gather and analyze data this year. We have not accomplished much yet, but we're working towards our plan and steady state of a consistent rotation on evaluation of the outcomes.

## 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.

N/A

## 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)?

N/A

5. **Findings: Interpretations & Conclusions**

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

   > Our big realization of this year was that our assessment process is in a very tentative state, and we need a more regular assessment cycle so that it can avoid disruption even during unforeseen circumstances. We recognize not having departmental frameworks set up has hurt our cycle this past year, and we will spend this year attempting to solidify our rubrics and our process.

6. **Closing the Loop: Dissemination and Use of <u>Current</u> Assessment Findings**

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

   > We have reconvened our assessment committee this fall under a new chair, as well as having regular meetings with a new committee and several with the broader department. We are setting up a schedule for a more regular and complete rotation, with the expectation that this will improve our yearly evaluation cycle.

   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.

   > We are currently revising rubrics and updating our 5 year rotation plan, and in particular are changing our rubrics drastically now that we are working with specific instructors of the relevant classes.

   If no changes are being made, please explain why.

   > N/A

7. **Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes**

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

   > Our last assessment cycle involved gathering data on communication and presentation; this represented our first round of gathering data assessment. However, due to those same health issues in our committee chair last year, we have not implemented changes or successfully closed that cycle. Our committee has found the data gathered (which had been misplaced); the data consisted of rubric during oral presentations in both CSCI 2050: Computer Ethics, and CSCI 4961/5962. We will analyze and present the data to the department this year.

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

| N/A |
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**C.** What were the findings of the assessment?

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

| N/A |
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**IMPORTANT: Please submit any assessment tools and/or revised/updated assessment plans along with this report.**