SAINT LOUIS UNIVERSITY.

Program-Level Assessment: Annual Report

Program Name (no acronyms): MS Supply Chain Management	Department: Operations & IT Management
Degree or Certificate Level: Masters	College/School: Chaifetz School of Business
Date (Month/Year): 9/2022	Assessment Contact: Xiao Zhang

In what year was the data upon which this report is based collected? Academic Year 2021-22

In what year was the program's assessment plan most recently reviewed/updated? Academic Year 2020-21

Is this program accredited by an external program/disciplinary/specialized accrediting organization? By Justin *Not that I know of. However, I remember that five or six years ago Reuven coordinated an external evaluation of the MSSCM. So I could be wrong.*

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

   1-Apply an integrated enterprise approach of flow of goods, services and information from suppliers to customers.

   2-Collect, interpret, evaluate and analyze data relevant to supply chains.

   3-Apply quantitative and computer models needed to make effective supply chain management decisions.

   4-Explain in both oral and written forms the interaction among multiple organizations involved in supply chains.

   5-Use purchasing and strategic sourcing concepts to optimize supply chain operations.

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 and identify the course(s) in which they were collected. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

   1-The outcome was assessed in OPM 5050 and OPM 6050 via web-based simulations and exam questions. One section of OPM 5050 was online asynchronous in Fall 2021.

   2-The outcome was assessed in OPM 6460 via a web-based simulation.

   3-The outcome was assessed in OPM 6600 via a case assignment, exam questions, and homework questions.

   4-The outcome was assessed in OPM 5050, OPM 6440, and OPM 6600 via oral case presentations and written project reports.

   5-The outcome was assessed in OPM 6460 via exam questions and homework questions.

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).

   1-The instructors evaluated learning by assessing a written report and by grading exam questions.

2-The instructor evaluated learning by assessing a written report.

3-The instructor used a rubric to assess learning, see attached.

4-The instructors evaluated learning by assessing written reports and oral presentations.

5-The instructor used a rubric to assess learning, see attached.

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)?

1-32 of 35 MSSCM students in OPM 5050 and 25 of 26 students in OPM 6050 achieved the learning outcome.

2-22 of 25 students achieved the learning outcome.

3-See attached results. In summary, 85% students exceeded expectations, 14% students met expectations, and 1% students needed improvement.

4-All students achieved the learning outcome.

5-22 of 25 students in OPM 6460 achieved the learning outcome.

5. **Findings: Interpretations & Conclusions**

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

Nearly all students are achieving the learning outcomes.

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?

   Following the end of the academic year, faculty shared their findings with the program director. Additionally, faculty met several times over the course of the academic year to discuss what curriculum changes might further improve student learning.

   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.

Based on assessment findings and discussion, course content is being updated across four courses (OPM 5050, OPM 6460, OPM 6440, and OPM 6600), teaching techniques have been revised to improve students' oral presentation and communication skills, and the courses composing the curriculum have been revised to include more relevant content from the field of data analytics and enterprise systems. The Department of O&ITM plans to launch two new OPM courses in 2023 to better prepare students for future job markets. OPM 6800 will replace the current OPM 5050. This course will improve students' statistical thinking and data-driven optimization skills. OPM 6090 will offer experiential learning. Students will apply supply chain management knowledge to solve real industry projects from local businesses under the guidance of O&ITM faculty.

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?

   In response to students' desire for STEM certification, course offerings and content were revised to focus on STEM-related topics. The new experiential learning course OPM 6090 will be launched in Spring 2023.

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

   Assessment is in-progress.

   C. What were the findings of the assessment?

   To date, the change resulted in new OPM courses.

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

   In close-the-loop fashion, we aim to hone course content and teaching techniques to improve our STEM-related offerings. Besides the two new OPM courses, the Department of O&ITM plans to redesign an existing ITM course and to launch a new ITM course focusing on ERP in 2023-2024. The Department of O&ITM also plans to create a universal rubric to assess all OPM and ITM courses.

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

OPM 6600 is a required course. In Fall 2021, the learning outcome **'apply quantitative and computer models needed to make effective supply chain management decisions'** was assessed. Table 1 shows the assessment rubrics of OPM 6600.

Rubric	Attribute	Exceeds Expectations (Excellent)	Meets Expectations (Satisfactory)	Needs Improvement (Below satisfactory and Unsatisfactory)
1	Define Problem	Clearly identifies and summarizes the problem/opportunity. Analyzes and assesses the situation with a clear awareness of what needs to be accomplished.	Problem/opportunity is identified but is somewhat clear and summarization is basic. Analyzes and assesses the situation with awareness of the goals of the analysis.	Problem/opportunity is identified but is not clear and summarization lacks focus. Analyzes and assesses the situation with limited awareness of the goals of the analysis.
2	Identify Solution Alternatives	Identifies one or more solutions that indicates a thorough comprehension of the problem.	Identifies one or more solutions that indicates some comprehension of the problem.	Identifies one solution that indicates surface-level understanding of the problem.
3	Computer Solutions	Organizes data inputs neatly for correct computerized solvers. Generate easy-to-interpret results.	Organizes data inputs neatly for correct computerized solvers.	Organizes data inputs neatly.
4	Make Appropriate Recommendations	Makes well-articulated actionable recommendation(s) that address most of the business objectives.	Makes actionable recommendation(s) which address some of the business objectives.	Makes actionable recommendation which addresses a few of the business objectives.

Table 1: OPM 6600 Rubrics

The results of the assessment of OPM 6600 are provided in Table 2. Around 85% students exceeded expectations, around 14% students met expectations, and around 1% students needed improvement. For students in the last category, the instructor needs to improve the teaching quality of multi-class capacity allocation heuristics. More examples could be beneficial.

Fall 2021, OPM 6600, 25 students

	Exceeds Expectations (E)	Meets Expectations (M)	Needs Improvement (N)
Rubric 1	21	4	0
Rubric 2	22	2	1
Rubric 3	21	4	0
Rubric 4	21	4	0

Table 2: OPM 6600 Assessment Summary

OPM 6460 is a required course. In Spring 2022, the learning outcome '**use purchasing and strategic sourcing concepts to optimize supply chain operations**' was assessed. Table 3 shows the assessment rubrics of OPM 6440.

Rubric	Attribute	Exceeds Expectations (Excellent)	Meets Expectations (Satisfactory)	Needs Improvement (Below satisfactory and Unsatisfactory)
1	Students can demonstrate an understanding of supply chain incentive conflicts.	A very thorough understanding of supply chain incentive conflicts. Students can suggest what contracts should be used to align different parties in a supply chain.	A reasonable understanding of supply chain incentive conflicts. Students can suggest to some extent what contracts should be used to align different parties in a supply chain.	A poor understanding of supply chain incentive conflicts.
2	Students can calculate the profits and inventory decisions of supply chain parties under a back-up contract.	A very thorough analysis of both the manufacturer and the retailer.	A reasonable analysis of either the manufacturer or the retailer.	A poor analysis of neither the manufacturer nor the retailer.
3	Students can make an appropriate contract recommendation	Recommend the optimal contract and analyze supply chain performance accordingly.	Recommend only the optimal contract.	Cannot recommend the optimal contract.

Table 3: OPM 6460 Rubrics

The results of the assessment of OPM 6460 are provided in Table 4. Around 68% students exceeded expectations, around 20% students met expectations, and around 12% students needed improvement. Students in the last category had poor attendance and/or were academically dishonest.

Spring 2022, OPM 6460, 25 students

	Exceeds Expectations (E)	Meets Expectations (M)	Needs Improvement (N)
Rubric 1	17	5	3
Rubric 2	17	5	3
Rubric 3	18	5	2

Table 4: OPM 6460 Assessment Summary