

## 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): 5/2021

Assessment Contact: Justin Goodson

In what year was the data upon which this report is based collected? Academic Year 2020-21

In what year was the program's assessment plan most recently reviewed/updated? 2019

### 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 and 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.

1- The outcome was assessed in OPM 6050 via a web-based simulation and exam questions. The course was offered in hybrid fashion, some students attending in person and others attending remotely.

2- The outcome was assessed in OPM 6460 via a web-based simulation. The course was offered in hybrid fashion, some students attending in person and others attending remotely.

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

*70-80 percent satisfactory*

4- The outcome was assessed in OPM 6440 via an oral case presentation and a written project report.

*cases in 6440, presentation grade, written report grade, project grade, all got As*

5- The outcome was assessed in OPM 6460 via a case assignment, exam questions, and homework questions. The class was offered in hybrid fashion, some students attending in person and others attending remotely.

### 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** (do not just refer to the assessment plan).

- 1- The instructor evaluated learning by assessing a written report and by grading exam questions.
- 2- The instructor evaluated learning by assessing a written report and by grading exam questions.
- 3- The instructor used a rubric to assess learning, see attached.
- 4- The instructor evaluated learning by assessing a written report and an oral presentation.
- 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- 21 of 21 students achieved the learning outcome.
- 2- 28 of 30 students achieved the learning outcome.
- 3- See attached results. In summary, on average 13.5 of 18 students exceeded expectations, on average 3 students met expectations, and on average 1.5 students needed improvement.
- 4- All students achieved the learning outcome.
- 5- See attached results. In summary, on average 24 of 28 students exceeded expectations, on average 3 students met expectations, and on average 3 students needed improvement.

#### 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 three courses (OPM 5050, OPM 6460, and OPM 6440), 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.

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.

**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 a STEM certification for the program.

**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.

**IMPORTANT: Please submit any assessment tools (e.g., 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 SCM course. In Fall 2020, 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 3: OPM 6600 Rubrics

The results of the assessment of OPM 6600 are provided in Table 2. Around 75% students exceeded expectations, around 17% students met expectations, and around 8% 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 2020, OPM 6600, 18 students			
	Exceeds Expectations (E)	Meets Expectations (M)	Needs Improvement (N)
Rubric 1	13	4	1
Rubric 2	14	3	1
Rubric 3	13	3	2
Rubric 4	14	2	2

Table 2: OPM 6600 Assessment Summary

OPM 6460 is a required SCM course. In Spring 2021, the learning outcome ‘**use purchasing and strategic sourcing concepts to optimize supply chain operations**’ was assessed. Table 3 shows the assessment rubrics of OPM 6460.

<b>Rubric</b>	<b>Attribute</b>	<b>Exceeds Expectations (Excellent)</b>	<b>Meets Expectations (Satisfactory)</b>	<b>Needs Improvement (Below satisfactory and Unsatisfactory)</b>
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 81% students exceeded expectations, around 9% students met expectations, and around 10% students needed improvement. For students in the last category, the instructor needs to improve the teaching quality of supply sourcing contracts.

<b>Spring 2020, OPM 6460, 30 students</b>			
	<b>Exceeds Expectations (E)</b>	<b>Meets Expectations (M)</b>	<b>Needs Improvement (N)</b>
Rubric 1	28	0	2
Rubric 2	23	3	4
Rubric 3	22	5	3

Table 4: OPM 6460 Assessment Summary