

Student Outcomes Assessment and Success Report AY2018-19

Completed reports due from the dean to the Assessment Office via Blackboard by October 15. Deans, assessment coordinators, and/or department chairs set their own internal deadlines for material review and request for refinement if not suitably addressing questions.

Unit/Program Name: _____OSCM_____ **Contact Name(s) and Email(s)** __K Bhattacharyya_____

Before you complete the form below, review your outcomes library and curriculum map to ensure that they are accurate and up to date. If not, you may submit a new version along with this summary. Templates are available on the [assessment website](#).

Part 1a: Summary of Assessment Activities

<p>a. What learning outcomes did you assess this past year? If this is a graduate program, identify the Graduate Student Learning Outcome each outcome aligns with.</p>	<p>b. (1) What assignments or activities did you use to determine how well your students attained the outcome? (2) In what course or other required experience did the assessment occur?</p>	<p>c. What were your expectations for student performance?</p>	<p>d. What were the actual data/results?</p>	<p>e. What changes or improvements were made or will be made in response to these assessment results or feedback from previous year's report?</p>
<p>1. Develop Supply Chain Framework</p>	<p>Students worked in teams with external clients to analyze (a) their product's supply chain in light of the SCOR Model and delivered recommendations for supply chain efficiency and process improvements (OSCM 300); (b) a specific process using the DMAIC six sigma principles and provide recommendations by designing an updated process map (OSCM 445)</p>	<p>At least 70% students will perform at a "satisfactory" level in the client presentation and status reports.</p>	<p>100% of OSCM 300 students and close to 98% of OSCM 445 students performed at the desired levels in the client presentations. 80% performed satisfactorily in the written reports (OSCM 300)</p>	<p>Industry 4.0 initiatives have been injected into the fall 2019 coursework to better prepare students for a career in advanced manufacturing.</p>
<p>2. Apply Problem solving methods</p>	<p>Cases dealing with the five core areas of supply chain analytics (statistical analyses, forecasting, optimization, simulation, and data mining; OSCM 310) Apply the problem solving approach into spreadsheet</p>	<p>At least 70% students will perform at a "satisfactory" level in the client presentation and status reports.</p>	<p>70% of students performed at a satisfactory level.</p>	<p>To maintain relevance and currency, more applications of R and Tableau are being injected into the fall 2019 curriculum. The Process simulation software ARENA is also being used as a test platform.</p>

	modeling, utilizing Excel and other tools used in the industry (Minitab/R/Rapidminer; OSCM 320, OSCM 425, OSCM 435)			
3. Supply Chain overall body of knowledge	<p>A body of knowledge exam is administered in the capstone OSCM 490 class.</p> <p>The exam comprises a good mix of analytics and MCQs pertaining to the SCOR (Supply Chain Operations Reference) Model in operations and associated dynamics - conceptual paradigms, acronyms - that test a student's preparation ahead of pursuing a career in supply chain. It is designed in accordance with the basic APICS (now ASCM) body of knowledge, also called the GSCA (Graduate Supply Chain Associate) certification.</p>	65% of students are expected to pass the exam with 65% or more correct answers.	Around 60% students passed the exam with 65% or more correct answers.	<p>We are quite close to our target. We plan to provide more discussion and preparatory sessions on the exam in spring 2019 to help better prepare the students.</p> <p>The plan is to make this process completely EXTERNAL in spring 2021 and have ASCM administer the Global Supply Chain Associate (GSCA) certificate exam for the OSCM 490 students. Passing this exam will automatically qualify the student through Exam 1 of the coveted CPIM certification. This endeavor requires a FEE, and we are working to find an avenue to pay for all students in the program.</p>

Note: If you would like to report on more than three outcomes, place the cursor in the last cell on the right and hit "tab" to add a new row.

Notes

- Use your outcomes library as a reference.
- Each outcome must be assessed by at least one direct measure (project, practica, exam, performance, etc.). If students are required to pass an examination to practice in the field, this exam must be included as one of the measures. At least one of the program's outcomes must use an indirect measure (exit interview, focus group, survey, etc.). Use your curriculum map to correlate outcomes to courses.
- Identify the score or rating required to demonstrate proficiency (e.g., Students must attain a score of "3" to be deemed proficient; at least 80% of students in the program will attain this benchmark."
- Note what the aggregate level of proficiency actually was and the number of students included in the cohort or sample (e.g., "85% of the 25 students whose portfolios were reviewed met the established benchmark").

Part 1b: Continuous Quality Improvement

In no more than one page, summarize 1) the discoveries assessment has enabled you to make about student learning (a. What specifically do students know and do well—and less well? b. What evidence can you provide that learning is improving?); 2) what your assessment plan will focus on in the coming year; and 3) how will this information be shared with other stakeholders?

1. We have had a 100% placement record for our students **five** years in a row. Our students are well respected in the business community and our alumni have made a tremendous impact of our program with their hard work, perseverance, and work ethic. Almost all our students complete a paid internship before graduation. Our courses are designed to prepare students specifically in a supply management career and/or analytics career. Most of our students graduate with a green belt in lean six sigma and with working knowledge of an ERP platform (like SAP).

They do very well in the following areas:

- a. analytics and problem solving
- b. using excel towards data-driven decision making
- c. supply base optimization
- d. supply market analysis
- e. process improvement and lean

They have room to improve in:

- a. self-confidence and self-belief
- b. working with minimum supervision
- c. doing the best work the first time (quality at the source)

2. We went through a series of curricular review meetings in fall 2018, highlighting the continued need for currency and relevance in our curriculum, while sustaining the level of rigor that makes our students competitive. We were able to optimize our resource capability to plan for an advanced manufacturing course in fall 2019. In line with industry 4.0 initiatives in advanced manufacturing, we have injected similar relevance in our course materials. A career-readiness grant of \$3500 has been received by an OSCM faculty to create a supply chain 4.0 incubator in the mid-west region, the first of its kind. This incubator will bring together case studies and hands-on learning of artificial intelligence (AI) and machine learning (ML), the internet of things (IoT), predictive analytics, auto-sensors, cybersecurity, and block chain into the curriculum. Effective fall 2019, these changes have been injected into the curriculum.

Part 2a: Summary of Student Success Activities

Based on the results of your assessment of student learning outcomes from Part 1 above, reflect on how this data will impact student success within your unit/program.

a. What goals/objectives were established this past year to aid student performance, retention, persistence, and completion?	b. What primary action steps were taken to make progress on each goal and who was responsible?	c. What data informs progress on each goal?	d. What were some accomplishments or achievements for each goal and/or challenges confronted?	e. Please indicate goals that are continuing and any goals that will replace a previous goal. Any additional goals can also be added on a new line.
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<p>1. The MO Department will deploy faculty in the SCoB Meis Student Success Center</p>	<p>Assign 0.2 Faculty FTE to assist MO students in Meis Center.</p> <p>Responsible: Department Chair</p>	<p>Assignment of Faculty</p>	<p>Meis Center held a freshmen boot camp for all students enrolled in Business 100, a course required of our freshmen. The Freshmen Bootcamp focuses on six topics to enhance the retention rate, and to introduce the students to professional behavior. The topics are: Professional Communication, Note Taking, Professional Dress, Classroom Etiquette, Social Media, and finally Career Fair preparation, a most relevant topic.</p>	<p>The MO Department will continue to deploy faculty in the Meis Center.</p>
<p>2. MO faculty will work closely with the Meis Center to support center activities to focus on first-year retention and overall student success.</p>	<p>Delegate one faculty member to work directly with the Meis Center on freshmen retention. ALL MO faculty teaching core classes partner with the Meis center in various capacities as part of their classes. At the program level, multiple classes from OSCM, Marketing, and Sales program partner with the Meis Center for fulfilling professional development learning goal</p> <p>Responsible: Department Chair</p>			<p>Continue to provide support activities</p>
<p>3. MO Faculty and MO Centers (SNC and CSMR) will work with the Meis Center on <u>new initiatives</u> to increase student success throughout their time at ISU</p>	<p>Roll out a dedicated career day for OSCM students.</p> <p>Responsible: Department Chair</p>	<p>The completion of the program</p>	<p>The fair was administered with a myriad of activities that ranged from educating freshmen with careers in supply chain and logistics (BUS 100 students), holding panel discussions with</p>	<p>Improve upon existing career day events.</p>

			sophomores and juniors on tricks to be successful in the supply chain world (OSCM 300 students), and hosting an internship fair for sophomores and juniors in the OSCM program	
4. Review current curriculum and consider possible expansions.	Faculty met to review the current curriculum. Responsible: OSCM faculty.	The completion of the program review.	Data Analytics Minor passed the SCoB curriculum committee and is now pending action at the university level.	

Notes

- a. These goals could be program/department wide but may also be focused on specific sub-populations of interest (e.g., service course student performance, transfer students, part-time students, students of a particular class year, students of color, etc.).
- c. Retention and completion data, D/F/drop rates, credit hour productivity (defined as credit hour enrollment at start of term versus credit hours earned at end of term) are common data examples. See [Blue Reports](#) database (access from Linda Ferguson in Institutional Research) or the [Office of Institutional Research](#) for ideas.

Part 2b: Continuous Quality Improvement

In no more than one page, summarize 1) the discoveries that attention to student performance, retention, persistence, and completion has enabled you to make about program/department systems, processes, and norms as it effects students; and 2) how this will positively impact student success, including with regard to the readiness of students for graduate study or a career?

1. The OSCM program builds on a rigorous set of courses that forces the student to be inquisitive and diligent with the ability to use both sides of the brain. Challenging the student to think "outside the box" is never easy and requires patience and a concerted effort. We normally start seeing the impact of our approach AFTER the student has successfully completed an external internship in the summer prior to their senior year. The internship brings learning and realization to a full circle for the students when they see the connections between our teaching and the real world. That is where "value" of our program is created in the students' mind. We have noticed a very different approach from students after their internship - their way of carrying themselves, taking classes seriously, pushing themselves to their best abilities - all of these come together.

Our approach to analytics in every coursework allows students to reinforce and repeat the learning so that they can retain it through the program and into the career. Our attrition rate after a student has declared the OSCM major in sophomore year is ZERO. This is because the students are advised meticulously in the context of FIT. The only students who defect from the program had declared OSCM major before they started university to later find a mismatch between the major's expectations and their capabilities.

It also helps that the OSCM faculty work very closely among each other (many of our assignments have same grading rubrics to ensure that the student does not have to reinvent the wheel in every OSCM class) and with our students (through personalized one-on-one advising on multiple fronts).

2. Our students are highly regarded in the industry.

- They compete and win regional/national case competitions
- We have had a 100% placement record for the past five years
- Our students generate starting salaries that are commensurate with (in fact, exceed) the national median salary of entry-level supply chain professionals
- Close to 100% of our students qualify and complete the Career Readiness Certificate as offered by the Career Center
- Our alumni continue to support our program by proving every day that they are the best in the business.

Please prepare this report as a Word document. Do not include any attachments. Instead, provide links to important supporting materials (e.g., detailed—but not student-specific—assessment results; rubrics; minutes; etc.), or upload them to the college’s assessment site in Blackboard.

Dear Kuntal,

Thank you so much for sharing your assessment process and findings for AY 2018-19 with the Assessment Council. You will find feedback and ratings on the rubric below. It is understood that some of the feedback might encompass practices that you already engage in but were not documented in this report. As the purpose of this evaluation is focused on recognizing great work and helping faculty improve assessment practice, it is not necessary to retroactively add documentation. Please feel free to let me know if you have any questions or if there is any way I can assist you in further developing assessment in your program.

This report will be shared with the Associate Dean(s) and Dean of your college and summarized findings will be shared as composite college/institutional data with the President's Office and the Provost's team.

Sincerely,

Kelley (x7975)

Program: B.S. Operations & Supply Chain Management	Overall Rating: Mature (2.19/3.00)
Strengths	Recommendations
<ul style="list-style-type: none">• Learning outcomes are clear, specific, and measurable. Noted that they are designed to reflect industry standards.• Courses and assignments used as assessment measures are well described. Students are given rich opportunities to demonstrate their learning in the context of the field. An industry-relevant body of knowledge exam is utilized.• Expected and actual student performance are clearly described.• Good notes on previous data-informed changes influencing current positive results, as well as plans for upcoming changes to improve student learning, particularly in preparation for the BoK exam.	<ul style="list-style-type: none">• I know the Business Core is the focus of alignment to the AACSB standards in SCOB, but note any alignment of your learning outcomes, as applicable.• You mention in the narrative that faculty have adopted the practice of using the same rubrics – note in the table whether rubrics or other tools are used as the evaluative tools for the measures described. If so, you could break results down by rubric level to better uncover any lurking areas of weakness within your already high-performing students.• It's noted that students have room for improvement in a few key areas (self-confidence, working with minimum supervision, etc.). Note how these are relevant to the overall learning outcomes and how they are being addressed moving forward.• Note how faculty are involved in assessment sharing and use.

Evaluation Criteria	Exemplary	Mature	Developing	Undeveloped
<p>Student Learning Outcomes</p>	<p>At least one learning outcome that is aligned with program coursework is assessed this cycle.</p> <p>Learning outcome(s) is specific, measurable, and student-centered.</p> <p>Rationale for assessment of this outcome(s) is made clear (ex: it is part of a standing assessment cycle, a need was identified, etc.)</p> <p>Learning outcome(s) directly link to college, institutional, and/or accreditor goals/standards.</p>	<p>At least one learning outcome that is aligned with program coursework is assessed this cycle.</p> <p>Learning outcome(s) is specific, measurable, and student-centered.</p> <p>Rationale for assessment of this outcome(s) is made clear (ex: it is part of a standing assessment cycle, a need was identified, etc.)</p>	<p>At least one learning outcome that is aligned with program coursework is assessed this cycle.</p> <p>Learning outcomes(s) is measurable.</p>	<p>No learning outcomes are identified for assessment or the outcomes that are identified are not linked to program outcomes aligned with program coursework (e.g. – curriculum map) or are not measurable.</p>
<p>Performance Goals & Measures</p>	<p>Performance goal identified for each learning outcome is clear and reasonable (ex: based on previous performance data, professional standards, etc.).</p> <p>Identified measures are designed to accurately reflect student learning, including at least one direct measure.</p> <p>Tools used to measure student performance are described and were reviewed for validity or trustworthiness prior to use (note this in the report; attach tools if applicable – ex: rubrics, checklists, exam keys, etc.).</p>	<p>Performance goal identified for each learning outcome is clear and reasonable (ex: based on previous performance data, professional standards, etc.).</p> <p>Identified measures are designed to accurately reflect student learning, including at least one direct measure.</p> <p>Tools or processes for evaluating student performance on measures are described (attach tools if applicable – ex: rubrics, checklists, exam keys, etc.).</p>	<p>Performance goal(s) is identified for each learning outcome.</p> <p>Identified measures (ex: assignments, projects, tests, etc.) are poorly suited to performance goals or are solely indirect measures.</p> <p>Tools or processes for evaluating student performance on measures are not described.</p>	<p>No goals for student performance of learning outcomes is identified, and/or no measures are provided.</p>

Analysis & Results	<p>Data is collected using the measures and tools identified.</p> <p>Results are reported with clear description of quality analysis (e.g., analysis follows accepted statistical or qualitative procedures).</p> <p>Results are shared in relation to performance goals.</p> <p>Results are discussed in relation to college, institutional, and/or accreditor goals/standards.</p>	<p>Data is collected using the measures and tools identified.</p> <p>Results are reported with clear description of analysis (e.g., analysis follows accepted statistical or qualitative procedures).</p> <p>Results are shared in relation to performance goals.</p>	<p>Data is collected using the measures and tools identified.</p> <p>Results are reported with little description of analysis.</p>	<p>No data is being collected.</p> <p>No results are provided.</p>
Sharing & Use of Results for Continuous Improvement	<p>Clear information is provided about sharing and using results to inform practice.</p> <p>Discussion of what was learned from results is provided and connected to plans for sharing and using results to inform practice.</p> <p>A plan for adjusting performance, goals, assessment, and/or program components based on results is outlined.</p>	<p>Clear information is provided about sharing and using results to inform practice.</p> <p>Discussion of what was learned from results is provided and connected to plans for sharing and using results to inform practice.</p>	<p>Limited information is provided about sharing or using results to inform practice.</p> <p>Some discussion of what was learned from results is provided.</p>	<p>No information is provided about sharing or using results to inform practice.</p> <p>No evidence of reflection on results is provided (ex: discussion, conclusions drawn)</p>
Overall Rating	<input type="checkbox"/> Exemplary	<input checked="" type="checkbox"/> Mature	<input type="checkbox"/> Developing	<input type="checkbox"/> Undeveloped