Program Outcomes Assessment

BS in Operations

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General Information (Program Outcomes Assessment)
Standing Requirements

Mission Statement

In this age of globalization, supply chain management professionals actively operate at the hub of an organization, interacting regularly with all other business segments in the firm, including sales and marketing, finance and human resources, and with suppliers and customers located around the world, thereby ensuring that the desired product/service is available to the customer in the right condition and quantity and at the right time, place, and cost.

Through their course work, interactions with industry professionals, and experience within organizations, Operations and Supply Chain Management graduates will understand how the coordination of sourcing, logistics, production operations, inventory management, and information technology in a cost effective manner is critical to the success of an organization. They will be able to

- Design and analyze global supply chains that meet or exceed customer quality, delivery, cost and service requirements.
- Apply the processes and tools of business analytics to a wide range of problems to support informed decision making.
- Interpret the critical importance of information flow in a global supply chain and its impact on operations, logistics, and supply chain management.
- Apply, through direct experience in an organization, the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

Outcomes Library

BS in Operations Mgt & Analysis Outcome Set

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a Supply Chain Framework</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Essay exam question or project</td>
<td></td>
</tr>
</tbody>
</table>

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply Problem Solving Methods</td>
<td>Foundational Studies: 2. Critically evaluate the ideas of others.</td>
</tr>
<tr>
<td>Students will be evaluated on their ability to solve a realistic case study problem</td>
<td></td>
</tr>
</tbody>
</table>

**Information Flow**

Given a specific customer need, interpret the critical importance of information flow in a global supply chain and its impact on operations, logistics, and supply chain management.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate Importance of Information Flow</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Case study, assignment or project in OSCM 490</td>
<td></td>
</tr>
</tbody>
</table>

**Direct Experience**

Through direct experience in an organization, apply the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply Methods in a Real Organization; Discipline Knowledge</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Internship or OSCM 445/445EL</td>
<td></td>
</tr>
<tr>
<td>Apply Methods in a Real Organization; Professional Skills</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Supervisor or industry contact evaluation of student</td>
<td></td>
</tr>
</tbody>
</table>

**Curriculum Map**

- **Active Curriculum Maps**
  - **OMA Curriculum Map** (See appendix)
    - Alignment Set: BS in Operations Mgt & Analysis Outcome Set
    - Created: 01/20/2011 8:41:57 am CST
    - Last Modified: 01/20/2011 8:51:35 am CST
  - **OSCM Curriculum Map** (See appendix)
    - Alignment Set: BS is Operations & Supply Chain Mgmt Outcomes Set
    - Created: 03/11/2013 2:34:35 pm CST
    - Last Modified: 03/11/2013 2:46:39 pm CST

**Communication of Outcomes**

To communicate our student learning outcomes to our constituents, we take the following actions:

1. List and describe outcomes on syllabi for all of our courses
2. List outcomes on our website
3. List outcomes on posters within the SCOB
4. Make employers at career fair aware of learning outcomes for our majors
5. Make freshmen in BUS 100 aware of learning outcomes for our major
Archive (This area is to be used for archiving pre-TaskStream assessment data and for current documents.)

## Archive

<table>
<thead>
<tr>
<th>File Attachments:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Operations Management and Analysis</strong> <em>(See appendix)</em></td>
</tr>
<tr>
<td>Operations Management and Analysis Assessment Plan</td>
</tr>
</tbody>
</table>

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2009-2010 Assessment Cycle

Assessment Plan

Outcomes and Measures

BS in Operations Mgt & Analysis Outcome Set

OMA Program Competencies
Students will demonstrate competencies in Operations Management & Analysis.

<table>
<thead>
<tr>
<th>Outcome 4: Familiarity with SAP</th>
<th>Measure: SAP hands-on exercises and related take home exam questions Direct - Other</th>
<th>Details/Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct - Other</td>
<td>Target: 70% perform at superior or satisfactory levels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation Plan (timeline): 2009-2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsible Individual(s): OMA faculty</td>
</tr>
</tbody>
</table>

Assessment Findings

Finding per Measure

BS in Operations Mgt & Analysis Outcome Set

OMA Program Competencies
Students will demonstrate competencies in Operations Management & Analysis.

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<th>Outcome 4: Familiarity with SAP</th>
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<td>Implementation Plan (timeline): 2009-2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsible Individual(s): OMA faculty</td>
</tr>
</tbody>
</table>

Summary of Findings: 100% of their majors performed at superior (63%) or satisfactory (37%) levels based on SAP hands-on exercises and related take home exam questions

Results: Target Achievement: Exceeded

Recommendations: Faculty now recommend spreading the exercises over the course of the semester to help students avoid procrastination that is detrimental to their performance.

Reflections/Notes: The improvement plan recommended in Fall 2008 (when 71% of students performed at acceptable levels), which consisted of allowing more time to complete exercises,
appears to have had a positive effect. OMA faculty have now assessed three of their six learning goals.

<table>
<thead>
<tr>
<th>Overall Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No text specified</td>
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</table>

<table>
<thead>
<tr>
<th>Overall Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>No text specified</td>
</tr>
</tbody>
</table>
# 2010-2011 Assessment Cycle

## Assessment Plan

### Outcomes and Measures

### BS in Operations Mgt & Analysis Outcome Set

#### OMA Program Competencies

Students will demonstrate competencies in Operations Management & Analysis.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measure</th>
<th>Details/Description</th>
<th>Target</th>
<th>Implementation Plan (timeline)</th>
<th>Responsible Individual(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome 1: Statistical analysis</strong></td>
<td><strong>Final Exam</strong>&lt;br&gt;<strong>Direct - Exam</strong>&lt;br&gt;Details/Description: Assess using the OMA 405 final exam, fall semesters&lt;br&gt;Target:&lt;br&gt;Implementation Plan (timeline): Fall every year.&lt;br&gt;Responsible Individual(s): Course Instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome 2: Fundamental ability to solve problems</strong></td>
<td><strong>Projects</strong>&lt;br&gt;<strong>Direct - Other</strong>&lt;br&gt;Details/Description: Assess using projects in OMA 435, spring semesters&lt;br&gt;Target:&lt;br&gt;Implementation Plan (timeline): Spring every year.&lt;br&gt;Responsible Individual(s): Course instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome 3: Knowledge of issues facing companies</strong></td>
<td><strong>Exam Questions</strong>&lt;br&gt;<strong>Direct - Exam</strong>&lt;br&gt;Details/Description: Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)&lt;br&gt;Target:&lt;br&gt;Implementation Plan (timeline): Fall and spring every year.&lt;br&gt;Responsible Individual(s): Course instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outcome 4: Familiarity with SAP</strong></td>
<td><strong>Selected Exam Questions</strong>&lt;br&gt;<strong>Direct - Exam</strong>&lt;br&gt;Details/Description: Use selected exam questions in OMA 445 (fall semesters)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Target:
Implementation Plan (timeline): Fall every year.
Responsible Individual(s): Course instructor

### Outcome 5: Operational function of a company

**Measure:** Asses Using Projects
- Direct - Other

**Details/Description:** Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.

**Target:**
Implementation Plan (timeline): Fall every year.
Responsible Individual(s): Course instructor

### Outcome 6: Business functional areas

**Measure:** Case Analysis
- Direct - Other

**Details/Description:** Assess using case analyses in OMA 490 (spring semesters)

**Target:**
Implementation Plan (timeline): Spring every year.
Responsible Individual(s): Course instructor

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### Assessment Findings

#### Finding per Measure

**BS in Operations Mgt & Analysis Outcome Set**

**OMA Program Competencies**

Students will demonstrate competencies in Operations Management & Analysis.

**Outcome 1: Statistical analysis**

**Measure:** Final Exam
- Direct - Exam

**Details/Description:** Assess using the OMA 405 final exam, fall semesters

**Target:**
Implementation Plan (timeline): Fall every year.
Responsible Individual(s): Course Instructor

**Findings for Final Exam**

*No Findings Added*

**Outcome 2: Fundamental ability to solve problems**

**Measure:** Projects
- Direct - Other

**Details/Description:** Assess using projects in OMA 435, spring semesters

**Target:**
solutions to the decision maker.

**Implementation Plan (timeline):** Spring every year.
**Responsible Individual(s):** Course instructor

**Findings for Projects**

*No Findings Added*

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**Outcome 3: Knowledge of issues facing companies**

- A fundamental knowledge of issues facing companies from the operations viewpoint, such as:
  - Inventory analysis and planning (e.g., MPS and MRP)
  - Capacity analysis and planning
  - Production activity control (PAC) concepts
  - Supply chain management
  - Global operations management

**Measure:** Exam Questions
**Direct - Exam**

**Details/Description:** Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)

**Target:**
**Implementation Plan (timeline):** Fall and spring every year.
**Responsible Individual(s):** Course instructor

**Findings for Exam Questions**

*No Findings Added*

---

**Outcome 4: Familiarity with SAP**

A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management.

**Measure:** Selected Exam Questions
**Direct - Exam**

**Details/Description:** Use selected exam questions in OMA 445 (fall semesters)

**Target:**
**Implementation Plan (timeline):** Fall every year.
**Responsible Individual(s):** Course instructor

**Findings for Selected Exam Questions**

*No Findings Added*

---

**Outcome 5: Operational function of a company**

Hands-on experience at examining and describing the operational function of a company (either manufacturing or service).

**Measure:** Asses Using Projects
**Direct - Other**

**Details/Description:** Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.

**Target:**
**Implementation Plan (timeline):** Fall every year.
**Responsible Individual(s):** Course instructor

**Findings for Asses Using Projects**

*No Findings Added*

---

**Outcome 6: Business functional areas**

**Measure:** Case Analysis
**Direct - Other**

*No Findings Added*
A fundamental understanding of how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.

**Details/Description:** Assess using case analyses in OMA 490 (spring semesters)

**Target:**

**Implementation Plan (timeline):** Spring every year.

**Responsible Individual(s):** Course instructor

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**Findings** for Case Analysis

*No Findings Added*

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**Overall Recommendations**

*No text specified*

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**Overall Reflection**

*No text specified*
2011-2012 Assessment Cycle

Assessment Plan

Outcomes and Measures

BS in Operations Mgt & Analysis Outcome Set

OMA Program Competencies
Students will demonstrate competencies in Operations Management & Analysis.

<table>
<thead>
<tr>
<th>Outcome 1: Statistical analysis</th>
<th>Measure: Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>A solid understanding of statistical analysis and its use in decision making.</td>
<td>Direct - Exam</td>
</tr>
<tr>
<td>Details/Description: Assess using the OMA 405 final exam, fall semesters</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td></td>
</tr>
<tr>
<td>Implementation Plan (timeline): Fall every other year.</td>
<td></td>
</tr>
<tr>
<td>Responsible Individual(s): Course Instructor</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome 2: Fundamental ability to solve problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker.</td>
</tr>
<tr>
<td>Measure: Projects</td>
</tr>
<tr>
<td>Direct - Other</td>
</tr>
<tr>
<td>Details/Description: Assess using projects in OMA 435, spring semesters</td>
</tr>
<tr>
<td>Target:</td>
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<td>Implementation Plan (timeline): Spring every other year.</td>
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<td>Responsible Individual(s): Course instructor</td>
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</table>

<table>
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<tr>
<th>Outcome 3: Knowledge of issues facing companies</th>
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<tbody>
<tr>
<td>A fundamental knowledge of issues facing companies from the operations viewpoint, such as</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>Measure: Exam Questions</td>
</tr>
<tr>
<td>Direct - Exam</td>
</tr>
<tr>
<td>Details/Description: Assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)</td>
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<tr>
<td>Target:</td>
</tr>
<tr>
<td>Implementation Plan (timeline): Fall every other year.</td>
</tr>
<tr>
<td>Responsible Individual(s): Course instructor</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome 4: Familiarity with SAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations,</td>
</tr>
<tr>
<td>Measure: Selected Exam Questions</td>
</tr>
<tr>
<td>Direct - Exam</td>
</tr>
<tr>
<td>Details/Description: Use selected exam questions in OMA 445 (fall semesters)</td>
</tr>
</tbody>
</table>
logistics, and supply chain management.

**Target:**
**Implementation Plan (timeline):** Every year in the semester in which the course is offered.
**Responsible Individual(s):** Course instructor

### Outcome 5: Operational function of a company

**Measure: Asses Using Projects**

<table>
<thead>
<tr>
<th>Direct</th>
<th>Other</th>
</tr>
</thead>
</table>

**Details/Description:** Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.

**Target:**
**Implementation Plan (timeline):** Fall every other year.
**Responsible Individual(s):** Course instructor

### Outcome 6: Business functional areas

**Measure: Case Analysis**

<table>
<thead>
<tr>
<th>Direct</th>
<th>Other</th>
</tr>
</thead>
</table>

**Details/Description:** Assess using case analyses in OMA 490 (spring semesters)

**Target:**
**Implementation Plan (timeline):** Spring every other year.
**Responsible Individual(s):** Course instructor

### Assessment Findings

#### Finding per Measure

<table>
<thead>
<tr>
<th>BS in Operations Mgt &amp; Analysis Outcome Set</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OMA Program Competencies</strong></td>
</tr>
<tr>
<td>Students will demonstrate competencies in Operations Management &amp; Analysis.</td>
</tr>
</tbody>
</table>

### Outcome 1: Statistical analysis

**Measure: Final Exam**

<table>
<thead>
<tr>
<th>Direct</th>
<th>Exam</th>
</tr>
</thead>
</table>

**Details/Description:** Assess using the OMA 405 final exam, fall semesters

**Target:**
**Implementation Plan (timeline):** Fall every other year.
**Responsible Individual(s):** Course Instructor

**Findings for Final Exam**

*No Findings Added*

### Outcome 2: Fundamental ability to solve problems

**Measure: Projects**

<table>
<thead>
<tr>
<th>Direct</th>
<th>Other</th>
</tr>
</thead>
</table>

**Details/Description:** Assess using projects in OMA 435, spring semesters

**Target:**
Implementation Plan (timeline): Spring every other year.

Responsible Individual(s): Course instructor

---

Findings for Projects

Summary of Findings: Case analysis, OMA 435, Spring 2012, n = 3 OMA majors
a) Fundamental ability to solve problems using analytical tools: 67% superior, 33% satisfactory
b) Ability to communicate those solutions to the decision maker: 100% superior

Results: Target Achievement: Met

Recommendations: Our students performed at a satisfactory level and no recommendations or corrective actions are necessary.

Reflections/Notes: A new assessment will need to be identified for next year since this course will not be offered again in its current form.

Substantiating Evidence:
- Case Results & Analysis (Excel Workbook (Open XML)) (See appendix)
- Results Summary (Excel Workbook (Open XML)) (See appendix)

These Findings are associated with the following Actions:
Problem Solving & Communication
(Action Plan; 2011-2012 Assessment Cycle)

---

Outcome 3: Knowledge of issues facing companies

3. A fundamental knowledge of issues facing companies from the operations viewpoint, such as:
   A. Inventory analysis and planning (e.g., MPS and MRP)
   B. Capacity analysis and planning
   C. Production activity control (PAC) concepts
   D. Supply chain management
   E. Global operations management

Measure: Exam Questions
Direct - Exam

Details/Description: Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)

Target:
Implementation Plan (timeline): Fall every other year.

Responsible Individual(s): Course instructor

Findings for Exam Questions
No Findings Added

---

Outcome 4: Familiarity with SAP

A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management.

Measure: Selected Exam Questions
Direct - Exam

Details/Description: Use selected exam questions in OMA 445 (fall semesters)

Target:
Implementation Plan (timeline): Every year in the semester in which the course is offered.

Responsible Individual(s): Course instructor

Findings for Selected Exam Questions
No Findings Added
Outcome 5: Operational function of a company

**Measure:** Asses Using Projects
Direct - Other

**Details/Description:** Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.

**Target:**

**Implementation Plan (timeline):** Fall every other year.

**Responsible Individual(s):** Course instructor.

**Findings** for Asses Using Projects

*No Findings Added*

Outcome 6: Business functional areas

A fundamental understanding of how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.

**Measure:** Case Analysis
Direct - Other

**Details/Description:** Assess using case analyses in OMA 490 (spring semesters)

**Target:**

**Implementation Plan (timeline):** Spring every other year.

**Responsible Individual(s):** Course instructor

**Findings** for Case Analysis

*No Findings Added*

Overall Recommendations

*No text specified*

Overall Reflection

*No text specified*

Action Plan

Actions

BS in Operations Mgt & Analysis Outcome Set

OMA Program Competencies

Students will demonstrate competencies in Operations Management & Analysis.

Outcome 2: Fundamental ability to solve problems

A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker.

**Action:** Problem Solving & Communication

**This Action is associated with the following Findings**

**Findings for Projects**

(Assessment Plan and Assessment Findings; 2011-2012 Assessment Cycle)

**Summary of Findings:** Case analysis, OMA 435, Spring 2012, n = 3 OMA majors

a) Fundamental ability to solve problems using analytical tools: 67% superior, 33% satisfactory

b) Ability to communicate those solutions to the decision maker:
100% superior

**Action Details:** As the course is redesigned, these elements of problem solving and communication will be retained. A similar, though not identical, assessment should take place in the revised OSCM 435.

**Implementation Plan (timeline):** Fall 2013

**Key/Responsible Personnel:** C. DePaolo/C. McLaren

**Measures:**

**Resource Allocations:**

**Priority:** Medium

---

**Status Report**

### Action Statuses

#### BS in Operations Mgt & Analysis Outcome Set

**OMA Program Competencies**

Students will demonstrate competencies in Operations Management & Analysis.

**Outcome 2: Fundamental ability to solve problems**

A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker.

**Action:** Problem Solving & Communication

**Action Details:** As the course is redesigned, these elements of problem solving and communication will be retained. A similar, though not identical, assessment should take place in the revised OSCM 435.

**Implementation Plan (timeline):** Fall 2013

**Key/Responsible Personnel:** C. DePaolo/C. McLaren

**Measures:**

**Resource Allocations:**

**Priority:** Medium

---

**Status Summary**

We are progressing on the development of this assessment. The new course will be offered for the first time in Fall 2013.

**Summary of Next Steps**

Identify an assignment
Develop the rubric
Gather results
Fall 2013
2012-2013 Assessment Cycle

Assessment Plan

Outcomes and Measures

BS is Operations & Supply Chain Mgmt Outcomes Set

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

Apply Problem Solving Methods
Students will be evaluated on their ability to solve a realistic case study problem

Measure: Case Study
Direct - Student Artifact

Details/Description: Students will be required to complete a realistic case study in which they analyze information using techniques of business analytics and provide a decision model and professional report to demonstrate and explain their findings.

Target: At least 70% of students will perform satisfactorily based on a rubric.

Implementation Plan (timeline): Spring 2013

Responsible Individual(s): All OSCM program faculty

Assessment Findings

Finding per Measure

BS is Operations & Supply Chain Mgmt Outcomes Set

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

Apply Problem Solving Methods
Students will be evaluated on their ability to solve a realistic case study problem

Measure: Case Study
Direct - Student Artifact

Details/Description: Students will be required to complete a realistic case study in which they analyze information using techniques of business analytics and provide a decision model and professional report to demonstrate and explain their findings.

Target: At least 70% of students will perform satisfactorily based on a rubric.

Implementation Plan (timeline): Spring 2013

Responsible Individual(s): All OSCM program faculty

Findings for Case Study

Summary of Findings: Students in OSCM 320 (24 majors and minors) were evaluated on three dimensions: (1) problem solving; (2) visual presentation of methods and results; and (3) written communication of results
(1) 100% of students were satisfactory or superior in problem solving;
(2) 100% of students were satisfactory or superior in visual presentation;
(3) 79% of students were satisfactory or superior in written communication of results.
While this meets the 70% target, we are still concerned about the 21% of students who are not communicating effectively.
**Results:** Target Achievement: Met

**Recommendations:** Within the course, we will continue to emphasize formatting and visual presentation of problem solving and results. An increased emphasis on technical writing will come the next time the course is offered.

**Reflections/Notes:** Half of the students who did not perform satisfactorily in writing were international students for whom English is a second language. We plan to pay special attention to those students on writing assignments.

**Substantiating Evidence:**
- OSCM 320 Case Study Results Spr2013.xlsx (Excel Workbook (Open XML)) (See appendix) Summary of results
- OSCM assessment discussion May 2013.pdf (Adobe Acrobat Document) (See appendix)
- Tracked discussion among faculty of results, reflections and recommendations.

---

**Overall Recommendations**

In fall, we will take a comprehensive look at the writing assignments across our major curriculum and decide what kinds of reports should be emphasized within what classes.

We will identify a common rubric to be used across courses and send a consistent message to students across courses.

We will try to provide students with examples of good writing in various formats.

More details are in the attached discussion document.

---

**Overall Reflection**

Program faculty had very good discussion via email (see attachment). We will reflect on actions over the summer and devise a plan in fall.

---

**Action Plan**

**Actions**

**BS in Operations Mgt & Analysis Outcome Set**

**OMA Program Competencies**

Students will demonstrate competencies in Operations Management & Analysis.

**Outcome 2: Fundamental ability to solve problems**

A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker.

**Action:** Improve Problem Solving

**This Action is associated with the following Findings**

No supporting Findings have been linked to this Action.

**Action Details:**
1) Emphasize earlier and more often the advantages of model layout
2) Give points on assignments for model layouts as well as correctness
3) Continue to give writing guidelines and resources
4) Add short writing assignments in class

**Implementation Plan (timeline):** Spring 2014, next time course is taught

**Key/Responsible Personnel:** C. DePaolo

**Measures:**
# Status Report

## Action Statuses

### BS in Operations Mgt & Analysis Outcome Set

**OMA Program Competencies**
Students will demonstrate competencies in Operations Management & Analysis.

<table>
<thead>
<tr>
<th>Outcome 2: Fundamental ability to solve problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker.</td>
</tr>
</tbody>
</table>

**Action:** Improve Problem Solving

**Action Details:**
1. Emphasize earlier and more often the advantages of model layout
2. Give points on assignments for model layouts as well as correctness
3. Continue to give writing guidelines and resources
4. Add short writing assignments in class

**Implementation Plan (timeline):** Spring 2014, next time course is taught

**Key/Responsible Personnel:** C. DePaolo

**Measures:**

**Resource Allocations:**

**Priority:** Medium

### Status for Improve Problem Solving

**Current Status:** In Progress

**Resource Allocation(s) Status:** We have already implemented most of the actions we planned, including:
1. Emphasize earlier and more often the advantages of model layout
2. Continue to give writing guidelines and resources
3. Add short writing assignments in class

These changes anecdotally appear to be helping, though no specific data has been collected.

**Next Steps/Additional Information:** The next time the assessment is done in Spring 2015, the effects of recent changes to the course content and emphasis will be measured.

### Status Summary

Ongoing changes being implemented. No hard data to support since next cycle is not yet due.

### Summary of Next Steps

Continue with aforementioned actions. Measure in Spring 2015.
# 2013-2014 Assessment Cycle

## Assessment Plan

### Outcomes and Measures

**BS is Operations & Supply Chain Mgmt Outcomes Set**

<table>
<thead>
<tr>
<th>Supply Chains</th>
<th>Measure: OSCM Body of Knowledge Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.</td>
<td>Direct - Exam</td>
</tr>
</tbody>
</table>

#### Details/Description:
- * 40 points for MCQs and 40 points on analytics.
- * MCQs are simple knowledge that students ought to have in the SCOR approach to supply chain management (Plan-Source-Make-Deliver) as they prepare for a career in supply chain management.
- * Supply chains thrive on performance geared towards end-to-end fulfillment...therefore the remaining 40 points test them on some supply chain/operations analytics.
- * The test is open book (but no digital media)

#### Target:
At least 70% of students "pass" the exam. (Passing is defined as answering 70% of questions or more correct.)

#### Implementation Plan (timeline):
Every 2 years in OSCM 490, Spring 14, Spring 16, Spring 18, etc.

#### Responsible Individual(s):
K. Bhattacharyya

### Supporting Attachments:
- OSCM Body of Knowledge Exam (Word Document (Open XML)) (See appendix)
- Exam questions

**Information Flow**

Given a specific customer need, interpret the critical importance of information flow in a global supply chain and its impact on operations, logistics, and supply chain management.

<table>
<thead>
<tr>
<th>Evaluate Importance of Information Flow</th>
<th>Measure: OSCM 490 Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case study, assignment or project in OSCM 490</td>
<td>Direct - Student Artifact</td>
</tr>
</tbody>
</table>

#### Details/Description:

- **Target:** At least 90% of students perform at satisfactory or superior levels.
- **Implementation Plan (timeline):** Spring 2014
- **Responsible Individual(s):** OSCM faculty

**Direct Experience**

Through direct experience in an organization, apply the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

**Apply Methods in a Real Organization; Discipline Knowledge**

<table>
<thead>
<tr>
<th>No measures specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship or OSCM</td>
</tr>
</tbody>
</table>
Apply Methods in a Real Organization; Professional Skills
Supervisor or industry contact evaluation of student

No measures specified

Assessment Findings

Finding per Measure

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

Develop Framework
Essay exam question or project

Measure: OSCM Body of Knowledge Exam
Direct - Exam

Details/Description: * 40 points for MCQs and 40 points on analytics.
* MCQs are simple knowledge that students ought to have in the SCOR approach to supply chain management (Plan-Source-Make-Deliver) as they prepare for a career in supply chain management.
* Supply chains thrive on performance geared towards end-to-end fulfillment...therefore the remaining 40 points test them on some supply chain/operations analytics.
* The test is open book (but no digital media)

Target: At least 70% of students "pass" the exam.
(Passing is defined as answering 70% of questions or more correct.)

Implementation Plan (timeline): Every 2 years in OSCM 490, Spring 14, Spring 16, Spring 18, etc.

Responsible Individual(s): K. Bhattacharyya

Supporting Attachments:
- OSCM Body of Knowledge Exam (Word Document (Open XML)) (See appendix)
exam questions

Findings for OSCM Body of Knowledge Exam

Summary of Findings: Only 41% of the students met the "passing" level. So, we do have room for improvement. "Areas of Improvement" from a broad overview of the results include:
  a. Aggregate Planning
  b. Product & Function Focus
  c. Analytics
  Run time
  Reorder Point
  z-statistics

Results: Target Achievement: Not Met

Recommendations: Continue to administer. Work on materials and activities to reinforce problem areas.

Reflections/Notes:

Information Flow
Given a specific customer need, interpret the critical importance of information flow in a global supply chain and its impact on
operations, logistics, and supply chain management.

Evaluate Importance of Information Flow
Case study, assignment or project in OSCM 490

Measure: OSCM 490 Assignment
Direct - Student Artifact

Details/Description:
Target: At least 90% of students perform at satisfactory or superior levels.
Implementation Plan (timeline): Spring 2014
Responsible Individual(s): OSCM faculty

Findings for OSCM 490 Assignment
No Findings Added

Direct Experience
Through direct experience in an organization, apply the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

Apply Methods in a Real Organization; Discipline Knowledge
Internship or OSCM 445/445EL

Apply Methods in a Real Organization; Professional Skills
Supervisor or industry contact evaluation of student

No measures specified

Overall Recommendations
No text specified

Overall Reflection
No text specified

Action Plan

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

Develop a Supply Chain Framework
Essay exam question or project

Action: Continue with current exam

This Action is associated with the following Findings
No supporting Findings have been linked to this Action.
**Status Report**

**Action Details:** 1. Curriculum driven: Our OSCM curriculum is designed to train a student towards one of the two thrusts – analytics and/or supply management. However, our core courses of the major provide enough insights to students on both the thrust areas. This is something I continue to maintain with students planning a career in supply chain – a balance of both right and left brains. The exam tests students on both these aspects. When it comes to supply management, students are tested on the bare-bone essentials of the SCOR model: plan-source-make-deliver-return. On the analytics side, the students are tested on performance measures (delivery, inventory, capacity, service), their ability to break down a supply chain problem and analyze its requirements, and their ability to utilize basic statistical tools to provide inferences.

2. CI Measure at the pedagogic end: Going forward, this test can be used as a standardized way of testing our students. As of now, we only have a sample of size 27. I believe that as we continue to gather data, we will have a good database. Going forward, I am planning to break down the exam questions by categories mentioned above, and slice up student performance by each category – that will help us evaluate areas where our students are lacking. I have also attached student names and their performance in the second sheet of my evaluation file...I am certain that we will have a strong correlation between the 205, 305, and 351 grades of these students along with the 490 grades! We may also look at specific areas where we may change/alter certain areas that we teach (or do not).

**Implementation Plan (timeline):** 2014-15

**Key/Responsible Personnel:** K. Bhattacharrryya

**Measures:** BOK exam in future

**Resource Allocations:** None at this time

**Priority:** Medium

---

**BS is Operations & Supply Chain Mgnt Outcomes Set**

**Supply Chains**

Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

---

**Develop a Supply Chain Framework**

**Essay exam question or project**

**Action:** Continue with current exam

**Action Details:** 1. Curriculum driven: Our OSCM curriculum is designed to train a student towards one of the two thrusts – analytics and/or supply management. However, our core courses of the major provide enough insights to students on both the thrust areas. This is something I continue to maintain with students planning a career in supply chain – a balance of both right and left brains. The exam tests students on both these aspects. When it comes to supply management, students are tested on the bare-bone essentials of the SCOR model: plan-source-make-deliver-return. On the analytics side, the students are tested on performance measures (delivery, inventory, capacity, service), their ability to break down a supply chain problem and analyze its requirements, and their ability to utilize basic statistical tools to provide inferences.

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**Implementation Plan (timeline):** 2014-15

**Key/Responsible Personnel:** K. Bhattacharrryya
Measures: BOK exam in future

Resource Allocations: None at this time

Priority: Medium

<table>
<thead>
<tr>
<th>Status for Continue with current exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Status: In Progress</td>
</tr>
<tr>
<td>Resource Allocation(s) Status: In progress; improvements are being made. New data has been collected but not analyzed.</td>
</tr>
<tr>
<td>Next Steps/Additional Information: Analyze new data. Assess progress. Continue to make changes to curriculum to address deficiencies.</td>
</tr>
</tbody>
</table>

Status Summary

No text specified

Summary of Next Steps

No text specified
2014-2015 Assessment Cycle

Assessment Plan
Outcomes and Measures

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

Develop a Supply Chain Framework
Essay exam question or project

Measure: OSCM 300 SC Analysis Project
Direct - Student Artifact

Details/Description: Students will select an employer in the Wabash Valley or Indianapolis areas in which they visit (multiple times), engage the client business on their own, and perform a supply chain analysis for them. This analysis should focus on the main product/service of the organization or product/service identified by the client. This will vary depending on the organization and agreements with the client company. The student artifacts will be evaluated with a rubric.

Target: At least 70% of students will perform at the satisfactory or superior levels.

Implementation Plan (timeline): Spring 2015

Responsible Individual(s): OSCM faculty

Supporting Attachments:

- Grading Rubric (Word Document (Open XML)) (See appendix)
- SC Analysis Project Assignment (Word Document (Open XML)) (See appendix)

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

Apply Problem Solving Methods
Students will be evaluated on their ability to solve a realistic case study problem

Measure: Case Study
Direct - Student Artifact

Details/Description: Students will be required to complete a realistic case study in which they analyze information using techniques of business analytics and provide a decision model and professional report to demonstrate and explain their findings.

Target: At least 70% of students will perform satisfactorily based on a rubric.

Implementation Plan (timeline): Spring 2015

Responsible Individual(s): All OSCM program faculty

Supporting Attachments:

- Case Study Assignment (Word Document (Open XML)) (See appendix)
- Grading Rubric (Word Document (Open XML)) (See appendix)

Assessment Findings
Finding per Measure
BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

<table>
<thead>
<tr>
<th>Develop a Supply Chain Framework</th>
<th>Measure: OSCM 300 SC Analysis Project</th>
</tr>
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<tbody>
<tr>
<td>Essay exam question or project</td>
<td>Direct - Student Artifact</td>
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**Target:** At least 70% of students will perform at the satisfactory or superior levels.

**Implementation Plan (timeline):** Spring 2015

**Responsible Individual(s):** OSCM faculty

**Supporting Attachments:**
- Grading Rubric (Word Document (Open XML)) (See appendix)
- SC Analysis Project Assignment (Word Document (Open XML)) (See appendix)

Findings for OSCM 300 SC Analysis Project

**Summary of Findings:** 100 percent of the teams created a final report graded as satisfactory or superior based on the supplied rubric. In addition to team-level metrics, there was a portion of the exercise which required students to individually contribute a relevant news article assessment. All students contributed at a satisfactory level.

**Results:** Target Achievement: Exceeded

**Recommendations:** The results (summary attached) are promising, in that students demonstrated an understanding of the core content of the course. The teaching strategies and methods used in this class appear to be effective.

**Reflections/Notes:** A method of assessment where the unit of analysis is more clearly the individual student is suggested for the future.

**Substantiating Evidence:**
- MIS 300 Project Assessment (Adobe Acrobat Document) (See appendix)

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

Apply Problem Solving Methods
Students will be evaluated on their ability to solve a realistic case study problem

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<th>Measure: Case Study</th>
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**Target:** At least 70% of students will perform satisfactorily based on a rubric.

**Implementation Plan (timeline):** Spring 2015

**Responsible Individual(s):** All OSCM program faculty

**Supporting Attachments:**
- Case Study Assignment (Word Document (Open XML)) (See appendix)
- Grading Rubric (Word Document (Open XML)) (See appendix)
## Findings for Case Study

*No Findings Added*

### Overall Recommendations

*No text specified*

### Overall Reflection

*No text specified*

### Action Plan

#### Actions

**BS is Operations & Supply Chain Mgmt Outcomes Set**

**Supply Chains**

Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

<table>
<thead>
<tr>
<th>Develop a Supply Chain Framework</th>
<th><strong>Action</strong>: Continue with current exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay exam question or project</td>
<td><strong>This Action is associated with the following Findings</strong></td>
</tr>
<tr>
<td></td>
<td>No supporting Findings have been linked to this Action.</td>
</tr>
<tr>
<td></td>
<td><strong>Action Details</strong>: Since performance on the artifact that was assessed was very good, no teaching changes are planned. The measurement methodology will be reviewed for possible revision in the 2015-16 assessment cycle.</td>
</tr>
<tr>
<td></td>
<td><strong>Implementation Plan (timeline)</strong>: 2015-16</td>
</tr>
<tr>
<td></td>
<td><strong>Key/Responsible Personnel</strong>: K. Bhattacharyya</td>
</tr>
<tr>
<td></td>
<td><strong>Measures</strong>: BOK exam in future</td>
</tr>
<tr>
<td></td>
<td><strong>Resource Allocations</strong>: None at this time</td>
</tr>
<tr>
<td></td>
<td><strong>Priority</strong>: Medium</td>
</tr>
</tbody>
</table>

**Business Analytics**

Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

<table>
<thead>
<tr>
<th>Apply Problem Solving Methods</th>
<th><strong>Action</strong>: Incorporate the measure into AY 2015-16 Assessment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be evaluated on their ability to solve a realistic case study problem</td>
<td><strong>This Action is associated with the following Findings</strong></td>
</tr>
<tr>
<td></td>
<td>No supporting Findings have been linked to this Action.</td>
</tr>
<tr>
<td></td>
<td><strong>Action Details</strong>: This measure was inadvertently added to the 2014-15 Assessment Plan off cycle, so no data was collected. It is incorporated into the 2015-16 plan per our past cycle.</td>
</tr>
<tr>
<td></td>
<td><strong>Implementation Plan (timeline)</strong>: AY 2015-16</td>
</tr>
</tbody>
</table>
Key/Responsible Personnel: OSCM Program Faculty
Measures: Student artifact.
Resource Allocations: N/A
Priority: High

Status Report

Action Statuses

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

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<th>Action: Continue with current exam</th>
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<td>Key/Responsible Personnel: K. Bhattacharryya</td>
</tr>
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<td></td>
<td>Measures: BOK exam in future</td>
</tr>
<tr>
<td></td>
<td>Resource Allocations: None at this time</td>
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<tr>
<td></td>
<td>Priority: Medium</td>
</tr>
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</table>

Status for Continue with current exam

No Status Added

Business Analytics
Students will apply the processes and tools of business analytics to a wide range of problems to support informed decision making.

Apply Problem Solving Methods
Students will be evaluated on their ability to solve a realistic case study problem

<table>
<thead>
<tr>
<th>Action: Incorporate the measure into AY 2015-16 Assessment Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Details: This measure was inadvertently added to the 2014-15 Assessment Plan off cycle, so no data was collected. It is incorporated into the 2015-16 plan per our past cycle.</td>
</tr>
<tr>
<td>Implementation Plan (timeline): AY 2015-16</td>
</tr>
<tr>
<td>Key/Responsible Personnel: OSCM Program Faculty</td>
</tr>
<tr>
<td>Measures: Student artifact.</td>
</tr>
<tr>
<td>Resource Allocations: N/A</td>
</tr>
<tr>
<td>Priority: High</td>
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</table>
**Status** for Incorporate the measure into AY 2015-16 Assessment Plan

*No Status Added*

<table>
<thead>
<tr>
<th>Status Summary</th>
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</thead>
<tbody>
<tr>
<td><em>No text specified</em></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary of Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>No text specified</em></td>
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</tbody>
</table>
2015-2016 Assessment Cycle

Assessment Plan

Outcomes and Measures

BS is Operations & Supply Chain Mgmt Outcomes Set

Supply Chains
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

Develop Framework
Essay exam question or project

Measure: OSCM 490 Research Briefings
Direct - Student Artifact

Details/Description: Students will prepare a research briefing addressing the supply chain of a particular company. Student work will be evaluated with a rubric.
Target: At least 90% of students perform at satisfactory or superior levels.
Implementation Plan (timeline): Spring 2016
Responsible Individual(s): OSCM faculty
Supporting Attachments:
- Grading Rubric (PowerPoint Presentation (Open XML)) (See appendix)
- Model answer (Word Document (Open XML)) (See appendix)
- Research Briefing Assignment (Word Document (Open XML)) (See appendix)

Measure: OSCM Body of Knowledge Exam
Direct - Exam

Details/Description: * 40 points for MCQs and 40 points on analytics.
* MCQs are simple knowledge that students ought to have in the SCOR approach to supply chain management (Plan-Source-Make-Deliver) as they prepare for a career in supply chain management.
* Supply chains thrive on performance geared towards end-to-end fulfillment...therefore the remaining 40 points test them on some supply chain/operations analytics.
* The test is open book (but no digital media)
Target: At least 70% of students “pass” the exam.
(Passing is defined as answering 70% of questions or more correct.)
Implementation Plan (timeline): Every 2 years in OSCM 490, Spring 14, Spring 16, Spring 18, etc.
Responsible Individual(s): K. Bhattacharyya
Supporting Attachments:
- OSCM Body of Knowledge Exam (Word Document (Open XML)) (See appendix)
  exam questions

Information Flow

Information Flow
Given a specific customer need, interpret the critical importance of information flow in a global supply chain and its impact on operations, logistics, and supply chain management.

Evaluate Importance of Information Flow

Measure: OSCM 490 Assignment
Direct - Student Artifact
Case study, assignment or project in OSCM 490

**Details/Description:**
- **Target:** At least 90% of students perform at satisfactory or superior levels.
- **Implementation Plan (timeline):** Spring 2016
- **Responsible Individual(s):** OSCM faculty

**Direct Experience**
Through direct experience in an organization, apply the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

**Apply Methods in a Real Organization; Discipline Knowledge**
- **No measures specified**
  - Internship or OSCM 445/445EL

**Apply Methods in a Real Organization; Professional Skills**
- **No measures specified**
  - Supervisor or industry contact evaluation of student

**Assessment Findings**

**Finding per Measure**

**BS is Operations & Supply Chain Mgmt Outcomes Set**

**Supply Chains**
Students will develop a framework to design and analyze global supply chains that meet or exceed customer quality, deliver, cost and service requirements.

**Develop Framework**
Essay exam question or project

**Measure:** OSCM 490 Research Briefings
Direct - Student Artifact

**Details/Description:** Students will prepare a research briefing addressing the supply chain of a particular company. Student work will be evaluated with a rubric.
- **Target:** At least 90% of students perform at satisfactory or superior levels.
- **Implementation Plan (timeline):** Spring 2016
- **Responsible Individual(s):** OSCM faculty

**Supporting Attachments:**
- Grading Rubric (PowerPoint Presentation (Open XML)) (See appendix)
- Model answer (Word Document (Open XML)) (See appendix)
- Research Briefing Assignment (Word Document (Open XML)) (See appendix)

**Findings for OSCM 490 Research Briefings**

No Findings Added

**Measure:** OSCM Body of Knowledge Exam
Direct - Exam
**Details/Description:** * 40 points for MCQs and 40 points on analytics.
  * MCQs are simple knowledge that students ought to have in the SCOR approach to supply chain management (Plan-Source-Make-Deliver) as they prepare for a career in supply chain management.
  * Supply chains thrive on performance geared towards end-to-end fulfillment...therefore the remaining 40 points test them on some supply chain/operations analytics.
  * The test is open book (but no digital media)

  **Target:** At least 70% of students "pass" the exam.

  *(Passing is defined as answering 70% of questions or more correct.)*

  **Implementation Plan (timeline):** Every 2 years in OSCM 490, Spring 14, Spring 16, Spring 18, etc.

  **Responsible Individual(s):** K. Bhattacharyya

**Supporting Attachments:**
- OSCM Body of Knowledge Exam (Word Document (Open XML)) (See appendix)
- Exam questions

---

**Findings for OSCM Body of Knowledge Exam**

*No Findings Added*

---

**Information Flow**

Given a specific customer need, interpret the critical importance of information flow in a global supply chain and its impact on operations, logistics, and supply chain management.

---

**Evaluate Importance of Information Flow**

**Case study, assignment or project in OSCM 490**

**Measure:** OSCM 490 Assignment

**Direct - Student Artifact**

**Details/Description:**

**Target:** At least 90% of students perform at satisfactory or superior levels.

**Implementation Plan (timeline):** Spring 2016

**Responsible Individual(s):** OSCM faculty

**Findings for OSCM 490 Assignment**

*No Findings Added*

---

**Direct Experience**

Through direct experience in an organization, apply the concepts and methods of Operations and Supply Chain Management to a significant decision facing the organization.

**Apply Methods in a Real Organization; Discipline Knowledge**

- Internship or OSCM 445/445EL

**Apply Methods in a Real Organization; Professional Skills**

- Supervisor or industry contact evaluation of student

---

**Overall Recommendations**

*No measures specified*
Program Outcomes Assessment
BS in Operations

**Overall Reflection**

*No text specified*

**Action Plan**

**Status Report**
2016-2017 Assessment Cycle

Assessment Plan

Assessment Findings
2017-2018 Assessment Cycle

Assessment Plan

Assessment Findings
2018-2019 Assessment Cycle

Assessment Plan

Assessment Findings
2019-2020 Assessment Cycle

Assessment Plan

Assessment Findings
Appendix

A. OMA Curriculum Map (Curriculum Map)
B. OSCM Curriculum Map (Curriculum Map)
C. Operations Management and Analysis (Adobe Acrobat Document)
D. Case Results & Analysis (Excel Workbook (Open XML))
E. Results Summary (Excel Workbook (Open XML))
F. OSCM 320 Case Study Results Spr2013.xlsx (Excel Workbook (Open XML))
H. Grading Rubric (PowerPoint Presentation (Open XML))
I. Model answer (Word Document (Open XML))
J. Research Briefing Assignment (Word Document (Open XML))
K. OSCM Body of Knowledge Exam (Word Document (Open XML))
L. Case Study Assignment (Word Document (Open XML))
M. Grading Rubric (Word Document (Open XML))
N. Grading Rubric (Word Document (Open XML))
O. SC Analysis Project Assignment (Word Document (Open XML))
P. MIS 300 Project Assessment (Adobe Acrobat Document)
Q. Grading Rubric (PowerPoint Presentation (Open XML))
R. Research Briefing Assignment (Word Document (Open XML))
S. Model answer (Word Document (Open XML))
T. OSCM Body of Knowledge Exam (Word Document (Open XML))
Operations Management and Analysis Assessment Plan

By the end of Spring Semester, 2008 (timeline provided by Office of Assessment):

1. Establish **OMA Program Assessment Team**: the OMA program faculty form the assessment team. Program Coordinator Connie McLaren represents the group at meetings and submits information.

2. Establish **Student Learning Outcomes** for OMA majors

3. **Program Competencies** (as 04/18/08)

   After completing the OMA major at ISU, students will have:

   1. A solid understanding of statistical analysis and its use in decision making
   2. A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker
   3. A fundamental knowledge of issues facing companies from the operations viewpoint, such as
      a. Inventory analysis and planning (e.g., MPS and MRP)
      b. Capacity analysis and planning
      c. Production activity control (PAC) concepts
      d. Supply chain management
      e. Global operations management
   4. A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management
   5. Hands-on experience at examining and describing the operational function of a company (either manufacturing or service)
   6. A fundamental understanding of how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.

3. Establish a **curriculum audit**. For OMA this is a course mapping document that matches each of the above competencies to one or more of the core, required, and elective courses for OMA majors. See the document titled **OMA Objective to Course Map.xls**.
4. The table below provides our **plan for determining the best available evidence** for assessment of the learning objectives.

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Method of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A solid understanding of statistical analysis and its use in decision making</td>
<td>Assess using the OMA 405 final exam, fall semesters</td>
</tr>
<tr>
<td>2. A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker</td>
<td>Assess using projects in OMA 435, spring semesters</td>
</tr>
<tr>
<td>3. A fundamental knowledge of issues facing companies from the operations viewpoint, such as a. Inventory analysis and planning (e.g., MPS and MRP) b. Capacity analysis and planning c. Production activity control (PAC) concepts d. Supply chain management e. Global operations management</td>
<td>Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)</td>
</tr>
<tr>
<td>4. A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management</td>
<td>Use selected exam questions in OMA 445 (fall semesters)</td>
</tr>
<tr>
<td>5. Hands-on experience at examining and describing the operational function of a company (either manufacturing or service)</td>
<td>Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.</td>
</tr>
<tr>
<td>6. A fundamental understanding of how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.</td>
<td>Assess using case analyses in OMA 490 (spring semesters)</td>
</tr>
</tbody>
</table>
**Progress Report, 12/03/2008**

By the end of Fall Semester, 2008:

1. Gathered and summarized the evidence examining at least two program learning outcomes;

   **Objective 1:**  *Data has been gathered. Assessment activities were conducted in May 2008. C. DePaolo has summarized the results.*

   **Objective 2:**  *Data has been gathered and a rubric for assessment has been completed. Other OMA faculty have assessed the results. C. DePaolo has summarized the results.*

   **Objective 4:**  *Data are being gathered and analyzed during fall 2008 in OMA 445.*

2. Considered this evidence at a meeting of the program faculty;

   *At a program meeting on 08/15/08, OMA faculty approved slight revisions to the program learning objectives.*

Revised OMA Learning Objectives 08/15/08

<table>
<thead>
<tr>
<th>Original Learning Objective</th>
<th>Revised Learning Objective</th>
<th>Method of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A solid understanding of statistical analysis and its use in decision making</td>
<td>1. Conduct appropriate statistical analyses and develop correct conclusions from the results.</td>
<td>Assess using the OMA 405 final exam, fall semesters</td>
</tr>
<tr>
<td>2. A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker</td>
<td>2. Choose appropriate analytical tools for problems, develop correct solution models, and communicate results to the decision maker.</td>
<td>Assess using projects in OMA 435, spring semesters</td>
</tr>
<tr>
<td>3. A fundamental knowledge of issues facing companies from the operations viewpoint, such as</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Inventory analysis and planning (e.g., MPS and MRP)</td>
<td>3. Illustrate and contrast issues facing companies from the operations viewpoint, such as</td>
<td>Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)</td>
</tr>
<tr>
<td>b) Capacity analysis and planning</td>
<td>a) Inventory analysis and planning (e.g., MPS and MRP)</td>
<td></td>
</tr>
<tr>
<td>c) Production activity control (PAC) concepts</td>
<td>b) Capacity analysis and planning</td>
<td></td>
</tr>
<tr>
<td>d) Supply chain management</td>
<td>c) Production activity control (PAC) concepts</td>
<td></td>
</tr>
<tr>
<td>e) Global operations management</td>
<td>d) Supply chain management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>e) Global operations management</td>
<td></td>
</tr>
<tr>
<td>4. A familiarity with SAP and how</td>
<td>4. Navigate SAP exercises and</td>
<td>Use selected exam questions in</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Details</th>
<th>Final Course/Assessment Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Hands-on experience at examining and describing the operational function of a</td>
<td>After direct observation, examine and describe the operational function of a company (either manufacturing or service)</td>
<td>OMA 445, fall semester. Students may have had a similar experience in BUS 351.</td>
</tr>
<tr>
<td>6.</td>
<td>A fundamental understanding of how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.</td>
<td>Explain and illustrate how different business functional areas interact with the operations function, and how the integration of all functions across a business leads to efficiency improvements.</td>
<td>OMA 490, spring semesters.</td>
</tr>
</tbody>
</table>

At a program meeting on 11/7/08, the program faculty considered evidence from objectives 2 and 2 and others associated with core classes.

3. Initiated implementation of any changes in curriculum or instruction based on this evidence;

Those teaching BUS 205 and BUS 305, on the basis of assessment activities in those courses, decided to implement the Aplia online homework system beginning fall 2009. Assessment results indicate that those students who spend more time engaged with the material (whether in lab or doing homework) do better.

4. Articulated clearly stated and viable student learning outcomes for each course and other learning experience (e.g., internship, project, research, comprehensive examination, thesis, dissertation) that is required in the program.

These objectives have been created and reviewed.

By the end of Spring Semester, 2009:

1. Determined what the best available evidence would be for assessing at least a third program learning outcome;

Program faculty are currently considering which outcome to address next.

2. Gathered and summarized the evidence examining at least this third outcome; Considered this evidence at a meeting of the program faculty; Initiated implementation of any changes in curriculum or instruction based on this evidence;
3. Constructed a plan for ongoing learning outcomes assessment and implementation and evaluation of any changes made;
4. Prepared a written report on the status of assessment in the program following guidelines provided by Academic Affairs.
5. Submitted copies of assessment rubrics and examples of original data (e.g., student papers, exams, internship evaluations) to the associate dean. This information will be placed in the NCA resource room.

By the end of Fall Semester, 2009:

1. Demonstrated ongoing progress in conducting learning outcomes assessment.
3. Submitted updated materials, as in #7 above, to the associate dean. This information will be added to the materials in the NCA resource room.
Progress Report, 06/01/2009

By the end of Spring Semester, 2009:

1. Determined what the best available evidence would be for assessing at least a third program learning outcome;

**Objective 1:** Data has been gathered. Assessment activities were conducted in May 2008. C. DePaolo has summarized the results.

**Objective 2:** Data has been gathered and a rubric for assessment has been completed. Other OMA faculty have assessed the results. C. DePaolo has summarized the results.

**Objective 4:** Data has been gathered from OMA 445 during the fall 2008 semester. K. Hozak has summarized and shared the results.

2. Gathered and summarized the evidence examining at least this third outcome; Considered this evidence at a meeting of the program faculty; Initiated implementation of any changes in curriculum or instruction based on this evidence;

At a program meeting on 4/1/09, the program faculty considered evidence from the third assessment activity as well as additional assessment results from BUS 351, the OMA core class.

Based on this evidence, several adjustments in instruction are planned.

- BUS 351 students showed an improvement over the assessment results from last fall, with more than 82% being classified as superior or satisfactory. The faculty will provide more practice with story problems so students will be better able to understand how to relate field information to theory.
- The evaluation of SAP exercises showed that about 70% were superior or satisfactory. Next time exercises will be given earlier in the semester and students will be encouraged to use better time management.

Side note: as an update to the December status report, we have officially adopted Aplia as a homework management system for BUS 205 beginning in Fall 2009.

3. Constructed a plan for ongoing learning outcomes assessment and implementation and evaluation of any changes made;

**OMA program faculty will continue to monitor the objectives that have been assessed and will add assessment of the remaining objectives to the schedule. The program faculty meet at least twice per semester and assessment results are always an agenda item.**

Evidence gathered for both NCA and AACSB will be made available for review.

4. Prepared a written report on the status of assessment in the program
following guidelines provided by Academic Affairs.

*Reports, including summaries and evidence, are submitted periodically. Materials are also posted in the NCA (Major Assessment) portion of the Reaffirmation of Accreditation Blackboard site.*

5. Submitted copies of assessment rubrics and examples of original data (e.g., student papers, exams, internship evaluations) to the associate dean. This information will be placed in the NCA resource room.

*This material is available on the Reaffirmation of Accreditation Blackboard site.*

By the end of Fall Semester, 2009:

1. Demonstrated ongoing progress in conducting learning outcomes assessment.
3. Submitted updated materials, as in #7 above, to the associate dean. This information will be added to the materials in the NCA resource room.