

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

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.

Learning Objective	Method of assessment
1. A solid understanding of statistical analysis and its use in decision making	Assess using the OMA 405 final exam, fall semesters
2. A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker	Assess using projects in OMA 435, spring semesters
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	Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)
4. A familiarity with SAP and how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management	Use selected exam questions in OMA 445 (fall semesters)
5. Hands-on experience at examining and describing the operational function of a company (either manufacturing or service)	Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.
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.	Assess using case analyses in OMA 490 (spring semesters)

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

Original Learning Objective	Revised Learning Objective	Method of assessment
1. A solid understanding of statistical analysis and its use in decision making	1. Conduct appropriate statistical analyses and develop correct conclusions from the results.	Assess using the OMA 405 final exam, fall semesters
2. A fundamental ability to solve problems using analytical tools, and to communicate those solutions to the decision maker	2. Choose appropriate analytical tools for problems, develop correct solution models, and communicate results to the decision maker.	Assess using projects in OMA 435, spring semesters
3. A fundamental knowledge of issues facing companies from the operations viewpoint, such as <ul style="list-style-type: none"> 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 	3. Illustrate and contrast issues facing companies from the operations viewpoint, such as <ul style="list-style-type: none"> 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 	Using selected exam questions, assess a, b, and c in OMA 445 (fall semesters) and d and e in OMA 490 (spring semesters)
4. A familiarity with SAP and how	4. Navigate SAP exercises and	Use selected exam questions in

enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management	explain how enterprise resource solutions aid in the efficiency of operations, logistics, and supply chain management.	OMA 445 (fall semesters)
5. Hands-on experience at examining and describing the operational function of a company (either manufacturing or service)	5. After direct observation, examine and describe the operational function of a company (either manufacturing or service)	Assess using projects in OMA 445, fall semester. Students may have had a similar experience in BUS 351.
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.	6. 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.	Assess using case analyses in OMA 490 (spring semesters)

At a program meeting on 11/7/08, the program faculty considered evidence from objectives 2 1 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.
2. Prepared an update to the spring 2009 report on the status of assessment in the program.
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.
2. Prepared an update to the spring 2009 report on the status of assessment in the program.
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.