

# Minnesota State University Moorhead

## MBA 682: Operations Management

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

The graduate level course on operations management will introduce students to concepts, tools and techniques used for managing manufacturing and service operations. Topics include productivity measures and improvement techniques, capacity planning, quality management and control, inventory planning and decisions, project management tools and analysis of waiting lines.

**B. COURSE EFFECTIVE DATES:** 03/04/2013 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Operations and its interaction with other enterprise functional areas
2. Development and interpretation of productivity measures
3. Forecasting principles, methods and error measures
4. Process and tools for capacity planning
5. Reliability theory
6. Quality control tools
7. Development, solution and interpretation of Linear Programming models
8. MRP, MRP II and ERP systems
9. Inventory models
10. Project management tools
11. Analysis of waiting lines

### D. LEARNING OUTCOMES (General)

1. Provide students with an understanding and appreciation for the interaction between operations function and other functions within an organization; develop an understanding of the major activities performed in managing the operations function; and expose students to a variety of tools and techniques used by operations managers to accomplish these activities.
2. Use operations management techniques to classify transformation systems used for production of goods and delivery of services.
3. Develop facility layouts for process and product focused systems.
4. Use principles of Business Process Re-engineering.
5. Use Six Sigma methodology of DMAIC for process quality improvement.
6. Use Principles of Lean methodology for process waste reduction.
7. Effectively manage a project using project management plans, CPM, PERT, and risk determination and mitigation.
8. Perform capacity planning by determining available capacity, required capacity and options to address the gap between the required and available capacity.

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted