

# Minnesota State University Moorhead

## MGMT 380: Operations Management

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires both of these prerequisites

MATH 234 - Introduction to Probability and Statistics

MGMT 260 - Principles of Management

Corequisites: None

MnTC Goals: None

Description and analysis of the operations function in an organization.

**B. COURSE EFFECTIVE DATES:** 06/01/1995 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Operations Function and Operations Management
2. Quality Management and Control
3. Inventory Management
4. Analysis of Waiting Lines
5. Overview of Project Management Scheduling
6. Techniques (CPM and PERT)
7. Decision Making
8. Linear Programming
9. Forecasting
10. Product and Service Design/Reliability
11. Strategic Capacity Planning
12. Process Selection and Facility Layout
13. Location Planning and Analysis
14. Transportation Problem

#### **D. LEARNING OUTCOMES (General)**

1. Provide students with an understanding and appreciation for the interaction between operations function and other functions within an organization.
2. Develop an understanding of the major activities performed in managing the operations function.
3. Expose students to a variety of tools and techniques used by operations managers to accomplish these activities.
4. Develop productivity measures and use developed measure to identify options to improve productivity.
5. Evaluate qualitative and quantitative technique of demand forecasting and metrics to determine forecast error and bias in forecast.
6. Evaluate operations decisions using decision making models under certainty, uncertainty and risk.
7. Determine and improve product and service quality using quality tools such as acceptance sampling, control charts, capability analysis.
8. Develop and determine use of inventory control models for item classification, order quantity determination and order timing determination.
9. Develop and solve linear optimization models using Excel Solver.
10. Evaluate performance of waiting lines using analytical queuing models.

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

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted