A. Course Description

Credits: 4

Prerequisites:
- MATH 115 College Algebra
- MGMT 310 Management Principles and Practices
- MIS 100 Fundamentals of Information Technology in Organizations
- STAT 201 Statistics I or equivalent with instructor's consent.

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

The purpose of this course is to introduce students to the fundamental concepts and techniques of production and operations management for both service and manufacturing organizations. It will address the role of operations in relation to other functions and the methods to increase organizational effectiveness and efficiency. Topics covered include: product and service design, capacity planning, design of work systems, location planning and analysis, material requirements planning, supply-chain management, enterprise resource planning, inventory management, total quality management, Six Sigma, lean enterprise and kaizen approaches, aggregate planning, just-in-time systems, scheduling, and project planning. Also included are tools and processes used in operations decisions such as forecasting, breakeven analysis, and critical path method using available software.

B. Course Effective Dates: 08/24/2002 - 12/31/2003 02/04/2004 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Learn the fundamental terminology and concepts in operations management.
2. Analyze business problems and situations using operations management concepts, frameworks, tools, cases and projects.
3. Apply quantitative models to problems of service delivery, statistical quality control, forecasting, inventory and materials management, supply chain management, facilities planning, and project scheduling, and interpret the results generated by the models.
4. Understand the critical role of operations in manufacturing and service.
5. Recognize and use common tools and models that operations managers use in preparing and presenting data to support the decision making process.
6. Understand how concepts and tools in operations management apply in real world situations.
7. Explain operations management issues and their implications for those outside of operations: finance, marketing, accounting, information systems, outside suppliers and customers.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

None