Common Course Outline MNGT 220 Operations Management 3 Credits

The Community College of Baltimore County

Description

MNGT 220 – **Operations Management** examines tools and practices for designing, planning, controlling, and improving manufacturing and service organizations. The use of operations strategy to gain competitive advantage is emphasized. Topics include facility location and layout design, forecasting, queuing models, inventory management, enterprise resource planning, production systems, and quality assurance.

3 Credits

Prerequisites: MATH 153, MNGT 105, MNGT 150

Overall Course Objectives

Upon completion of this course students will be able to:

- 1. describe the techniques available for modeling logistics and supply chain systems;
- 2. differentiate among logistics and supply chain systems by using several operations research techniques;
- 3. design a supply chain network that achieves customer service or cost objectives;
- 4. determine inventory requirements for dependent and independent inventory systems across multiple levels of supply;
- 5. examine network processes commonly encountered in logistics and supply chain management;
- 6. discuss the importance and impact of customer requirements on supply chain planning and strategy;
- 7. apply cycle time and process lead time in real-world scenarios;
- 8. explain process cycle efficiency benchmarks;
- 9. describe project management methods and tools for supply chain applications; and
- 10. identify quality principles and methods of controlling or monitoring quality of a product or service.

Major Topics

- I. Introduction to Operations and Supply Chain Management
- II. Operations and Supply Chain Strategies
- III. Process Choice and Layout Decisions in Manufacturing and Services
- **IV. Business Processes**
- V. Managing Quality
- VI. Managing Capacity

- VII. Advanced Waiting Line Theory and Simulation Modeling
- VIII. Supply Management
- IX. Logistics
- X. Forecasting
- XI. Sales and Operations Planning
- XII. Managing Inventory Throughout the Supply Chain
- XIII. Managing Production Across the Supply Chain
- XIV. Supply Chain Information Systems
- XV. Just In Time/Lean Production
- XVI. Managing Projects
- XVII. Developing Products and Services

Course Requirements

Grading procedures will be determined by the individual faculty member but will include the following:

Grading/exams

- A minimum of three exams
- A minimum of two written case study assignments
- A minimum of 10 homework assignments to count toward the final grade

Written Assignments: Students are required to use appropriate academic resources.

Date Revised: [08/25/15]