

**Northern Marianas College**  
**CURRICULUM ACTION REQUEST**

**Effective Semester / Session:** Fall 2015

**Type of Action:**

- New
- Modification
- Move to Inactive (Stop Out)
- Cancellation

**Course Alpha and Number:** MG 403

**Course Title:** Operations Management

**Reason for initiating, revising, or canceling:**

Operations Management is designed to provide students in the Bachelor of Science in Business Management program with an understanding as to how effective operations and supply chain management contributes to the competitiveness and survival of an organization. Students will be introduced to concepts, principles, and techniques that can be leveraged to analyze, control, and improve critical processes responsible for efficiently making and delivering goods and services without losing sight of the goal. These critical processes reside in manufacturing, as well as service, organizations; these critical processes are evident in for-profit, as well as non-profit, organizations. Students in the BSBM program will be exposed to key operational and supply chain challenges having strategic and tactical implications, as well as various conceptual aids and quantitative techniques to cope with these challenges.

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Chavel Green

Proposer

06/25/15  
Date

  
Chavel Green

Department Chair

06/25/15  
Date

  
Barbara K. Merfalen

Dean of Academic Programs and Services

7.28.15  
Date

# Northern Marianas College

## Course Guide

**Course:** MG 403 Operations Management

### 1. Department

Business

### 2. Purpose

Introduction to Operations Management is designed to provide students in the Bachelors of Science in Business Management (BSBM) program with an understanding as to how effective operations and supply chain management contributes to the competitiveness and survival of an organization. Students will be introduced to concepts, principles, and techniques that can be leveraged to analyze, control, and improve critical processes responsible for efficiently making and delivering goods and services without losing sight of the goal. These critical processes reside in manufacturing, as well as service, organizations; these critical processes are evident in for-profit, as well as non-profit, organizations. Students in the BSBM program will be exposed to key operational and supply chain challenges having strategic and tactical implications, as well as various conceptual aids and quantitative techniques to cope with these challenges.

### 3. Description

#### A. Required/Recommended Textbook(s) and Related Materials

Required:

Krajewski, L. J., L. P. Ritzman, and M. K. Malhotra. 2013.  
*Operations Management: Processes and Supply Chains. 10th Edition.* Upper Saddle River, NJ: Prentice Hall.

Readability Level: College Level

#### B. Contact Hours

1. **Lecture:** 3 hours per week / 45 hours per semester
2. **Lab:** N/A
3. **Other:** N/A

#### C. Credits

1. **Number:** 3
2. **Type:** Regular degree credits

#### D. Catalogue Course Description

This course provides students in the BSBM program with the concepts, techniques, and tools needed to design, analyze, and improve core operational capabilities. Students will apply these concepts to a broad range of application domains and industries. The course emphasizes the effect of uncertainty in decision-making, as well as the interplay between high-level financial objectives and

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operational capabilities. Topics covered include production control, supply chain management, risk pooling, quality management, process design and revenue management. Prerequisite: Must complete 60 credit hours to maintain junior level. English Placement Level: EN 202. Math Placement Level: MA 161. (Offered Fall).

## **E. Degree or Certificate Requirements Met by Course**

A "C" grade or better in this course satisfies a core course requirement in Northern Marianas College Bachelor of Science in Business Management.

## **F. Course Activities and Design**

Course activities include lecture, discussions, homework assignments, tests, quizzes, peer reviewed case study, simulations, and a final exam.

## **4. Course Prerequisite(s); Concurrent Course Enrollment; Required English/Mathematics Placement Level(s)**

Prerequisites: Must complete 60 credit hours to maintain junior level.  
English Placement Level: EN 202  
Math Placement Level: MA 161

## **5. Estimated Cost of Course; Instructional Resources Needed**

Cost to the College: Instructor's salary.

Cost to the Student: Tuition for a 3-credit hour course and the cost of the textbook.

Instructional resources needed for this course include, overhead projector, TV/VCR, videotaped programs, library books, and dry-erase board/markers.

## **6. Method of Evaluation**

Student's grades will be based on the regular letter grade system as described below:

|                                |     |
|--------------------------------|-----|
| A: Excellent-grade points:     | 4.0 |
| B: Above average-grade points: | 3.0 |
| C: Average-grade points:       | 2.0 |
| D: Below average-grade points: | 1.0 |
| F: Failure-grade points:       | 0.0 |

NMC's grading and attendance policies will be followed.

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### 7. Course Outline

This is a topical outline and does not necessarily indicate the sequence in which the material will be presented.

- 1.0 Creating Value through Operations Management
  - 1.1 Using operations to compete project management
  
- 2.0 Managing Processes
  - 2.1 Process strategy
  - 2.2 Process analysis
  - 2.3 Quality and performance
  - 2.4 Capacity planning
  - 2.5 Constraints management
  - 2.6 Lean systems
  
- 3.0 Managing supply chains
  - 3.1 Supply chain inventory management
  - 3.2 Supply chain design
  - 3.3 Supply chain location decisions
  - 3.4 Supply chain integration
  - 3.5 Supply chain sustainability and humanitarian logistics
  - 3.6 Forecasting
  - 3.7 Operations planning and scheduling
  - 3.8 Resource planning

### 8. Instructional Goals

This course will introduce students to:

- 1.0 The fundamental processes of managing and controlling a variety of operations, covering both manufacturing and services;
- 2.0 The differences between manufacturing and service processes;
- 3.0 How a process is designed and analyzed in manufacturing and services;
- 4.0 How and why companies must manage capacity;
- 5.0 The role of sourcing and distribution in operations management;
- 6.0 The methods of managing inventory;
- 7.0 The network diagram to manage a project;

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- 8.0 Design lean supply chains; and
- 9.0 The importance of quality to the organization.

### 9. Student Learning Outcomes

Upon successful completing of this course, students will be able to:

- 1.0 Explain the role of operations and its relationship with the other functional areas of a business organization;
- 2.0 Analyze operation processes from a variety of perspectives such as productivity, workflow, and quality;
- 3.0 Apply the "Transformation Model" as a construct for understanding the relationship between the inputs, processes, and outputs of an organization;
- 4.0 Report on techniques and methodologies for managing an organization's productive resources;
- 5.0 Integrate basic design principles to determine appropriate facility location and layout;
- 6.0 Relate quality management and apply quality management principles to continuous improvement in operations management;
- 7.0 Evaluate the goal of Supply Chain Management and its application in a variety of organizational settings;
- 8.0 Reproduce the critical factors involved in inventory control systems; and
- 9.0 Appraise the operational processes in the student's own organization.

### 10. Assessment Measures

Assessment of student learning may include, but not be limited to, the following:

- 1.0 Tests and quizzes;
- 2.0 Peered reviewed case studies;
- 3.0 Simulations;

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- 4.0 Homework;
- 5.0 Research assignments;
- 6.0 Class participation;
- 7.0 Oral presentations; and
- 8.0 Final Exam.