INTRODUCTION

Course Concept
This course is an introduction to the field of “Operations and Production Management” (OPM). During this course we will discuss the basic concepts of OPM from both the qualitative and quantitative perspectives.

Basic Concepts of Operations Management
We will provide focus on more traditional topics of Operations Management such as product design, systems and product life cycles, material and inventory management, supply chain, logistics, human resources and operations research techniques. Real world topics in the areas of intermodal transportation, electronic commerce, service sector management, production, environmental issues and safety in the workplace will also be integrated into this course. Other issues of major concern with respect to Operations Management include intellectual property, facility security and global supply security.

Concepts of security in OPM will be integrated into course topics. Security has become a major issue for operations managers and we will discuss these concepts throughout the course. Today there are significant security challenges throughout the globe. We will incorporate many of these issues into the lectures. I also expect to have representatives from the Department of Homeland Security lecture on Global Supply Security.

Operations and Technology
Particular attention will be paid to the impact that technology, particularly information technology, has had and will continue to have on businesses and more specifically operations. Technological change is occurring at a rapid pace with no indication that this pace is going to slow. If anything, the pace of technological change may be increasing. This technology dynamic presents a serious threat to existing structures and processes. It needs to be noted, however, that these changes also bring new opportunities for existing businesses and open up new business opportunities based on technology. Both “land line” and “wireless” based networks offer many opportunities in the area of “electronic commerce”. These technologies offer huge productivity improvements and opportunities for businesses that possess the capability to exploit this technology.

Operations and the Global Economy
Globalization has also had a major impact on Operations Management and business in general. We will discuss some of the issues associated with this technology based change.
Operations and Systems Engineering Principles

A key component of this course will be to introduce the student to the “Systems Approach” to designing, managing and improving operations. This is an important conceptual aspect of OPM and will require the student to become familiar with a life cycle systems based approach to the design and development and/or re-engineering of “systems”.

Operations and Quantitative Analysis

Considerable time will be spent in learning the application of Quantitative Analysis (Operations Research) techniques to solving OPM problems. Topics will include Linear Programming, Transportation Algorithm, Simulation, Statistical Control Charts, Program Evaluation and Review Technique (PERT), Forecasting Methods.

Learning Objectives

At the completion of this course students should;

1. Demonstrate knowledge if core operations management theories and concepts;
2. Demonstrate knowledge of basic analytical skills used by operations managers;
3. Apply those skills to a range of operations management decisions;
4. Communicate this knowledge of operations effectively to others;
5. Demonstrate knowledge of the Systems Engineering Life Cycle Process and how it relates to various functions of operations management;
6. Demonstrate a basic knowledge operations management security and safety issues. Including global supply chain issues and knowledge of the Department of Homeland Security “Customs-trade Partnership against Terrorism” (CT-PAT)
7. Demonstrate an understanding of impact of the ever changing technology on operations management.
You can purchase in the book store. Be sure purchase the books ordered by Prof Minogue. You should be sure that the book you purchase has the code for access to the publishers “myomlab”. If you opt to use E Books, that is ok. Be sure to get correct edition and be sure to get access to the “MYOMLAB: feature that comes with the text. This is an online access to power point slides, videos, and Operation Research Software for quantitative analysis.

Please feel free to order an “E-Book Version” if available”

Alternative Package 1
Heizer, Render, & Munson
ISBN 13-9780134163512
This is an unbound package that you can place in a looseleaf binder.
You still need to purchase the MYOMLAB access.

Alternative Package 2

MYOMLAB ACCESS CODE minogue66144. This code is for access to my course. This code is in addition to the basic access code to the MYOMLAB that should come with the package you purchase.

Office Hours/Contact Information
Office Hours
By appointment. I usually arrive approximately 1/2 hour to 1 hour before class time on the day of class. Once office assignments are finalized I will send you schedule for office hours.
Telephone 718 817-1004
Email minogue@fordham.edu (this is probably the best way to reach me!)
**Assignments**
Assignments are a very important part of this course. Assignments should either be typed or handwritten neatly. Do not tear pages out of your notebook. Multiple page assignments should be stapled. Do not fold the corners to group pages together. Assignments should be on time. I do realize that many of you work and may have to miss class due to employment/internship responsibilities. That is ok. But remember to get the assignments in as soon as possible.

**Attendance**
You should make every effort to attend class. I understand that sometimes due to work or other situations you may miss class. Remember that you are paying for this class so be sure you get the material from a fellow student or see me after class or during office hours. Please make every effort to be on time. Arriving late can be a distraction to fellow students. So if you arrive late be careful how you enter the class during the lectures.

**Grades**
Midterm 40%
Final 45
Assignment/Projects 15 (Special projects may include internet assignments and other limited research projects.)

Make up exams are given in extreme circumstances only. If you anticipate a problem with the exam schedule please let me know as soon as possible.
Course Outline

Part 1 Introduction to Operations Management
This section of the course will provide an overview of the field of Operations Management. Topics will include an historical perspective, overview of systems concepts and production system in particular, the systems and product life cycle, the eleven (11) critical OM decisions, the role of managers and critical issues in todays high tech “global” economy and issues and concepts associated with Intermodal Freight Transportation. Concepts of decision making within a “Strategic, Tactical and Operations Framework” will also be discussed. We will review some basic concepts of Decision Theory.
Chapters 1,2,3
Quantitative Module A

Part 2 Design Products and Operations
In this portion of the course we will discuss issues related to quality, product and service design, process design, implications of advanced technology, brief discussion of facility location, human resource (HR) management, job design and facility layout and environmental issues for OM Managers. We begin to apply systems engineering concepts though discussion and group projects.
Chapters 5,6,7,
Selected topics from chapters 8,9,10
Quantitative module B Linear Programming
Quantitative Module C Transportation Model

Part 3 Managing Operations
This section of the course will be concerned with the actual management of Operations. Scheduling, Supply Chain Management, 3rd Party Logistics Providers in Global Transportation, Global Supply Chain Security (CT-PAT).