Syllabus – Spring 2012
MBA 638-002
Operations Management

Instructor: Dr. Michael Naor, Assistant Professor of Operations Management.
Office: Enterprise Hall, Room 153
Phone: (703) 993-4756
E-mail: mnaor@gmu.edu
Office Hours: The office hours will be at Fairfax campus, Enterprise Hall, Room 153, on:
Monday 5:30 – 6:30 PM and Thursday 3:00-4:00 PM
Students are most welcome by appointment at other times too.

Prerequisites: Admission to the MBA program.


Additional reading:

Class Sessions: Lecture Section 002, class meets Monday, 7:20-10:00 PM, at University Hall, Room 1200.

Course Website: http://courses.gmu.edu/

PowerPoint lecture notes will be posted throughout the semester. For ease of taking notes, print out the lecture notes and bring them to class. I recommend using the ‘Handouts’ option with 3 Slides per page to save paper.
(The PowerPoint notes are only supplemental material. They are not a substitute or replacement for classroom discussions and attendance)

Students must be officially registered in this section to receive a grade. It is the sole responsibility of the student to verify their own registration status. (I will not verify your registration.) Specifically, you will not receive a grade if your name does not appear on the official class list. (Don’t wait until the end of the semester to be surprised) Registration
problems should be directed to either the SOM Office of Student Services or the Registrar’s Office.

Course Description:
Course will be based on the concepts, principles and techniques for managing manufacturing and service operations. Quantitative / qualitative methods for improving management of operations will be covered. The course will include the four major decision making areas of manufacturing and service operations: process, quality, capacity and inventory.

Operations management, as a field, is responsible for the production of goods and services in an organization. Operations encompass the bulk of most organizations with the largest portions of assets, working capital and human resources. Operations also has a significant impact on other areas of the company including marketing, finance, and accounting as well as an impact on the external customers of the firm. As such, performance of the firm will be largely determined by the operations area.

Learning Goals for the MBA program:
(note: Goals addressed in this course are highlighted in bold text)
1. Teaming & Leading: Our graduates will demonstrate the team leadership and interpersonal skills needed to form, lead, and work effectively on diverse organizational teams.

2. Analytical Decision Making: Our students will demonstrate the ability to analyze uncertain complex management situations using appropriate tools, techniques and information systems for decision-making.

3. Knowledge of Functional Business Disciplines: Our graduates will demonstrate the ability to integrate knowledge from all functional areas of business into a meaningful firm-level perspective.

4. Global Understanding: Our graduates will demonstrate a perspective on how businesses operate in the global environment.

5. Communication Skills: Our graduates will demonstrate written, oral and presentations skills necessary to explain problems and solutions effectively and persuasively.

6. Ethics and Social Responsibility: Our graduates will have a sense of professional and social responsibility in the conduct of managerial affairs.

Course Objectives and Course Competencies:
By the end of the course, the student will be able to:

⇒ Develop tools to improve business processes in order to increase competitiveness.
⇒ Understand the components of operations management and how they are related to other major business decision areas.
⇒ Learn project management and scheduling techniques.
⇒ Apply decision-making tools such as control charts, quality tools, forecasting models and inventory models in both manufacturing and service applications.
⇒ Understand how to use tools of quality and quality control to analyze variability in processes.
⇒ Develop tools to analyze and manage efficiently the supply chain.
⇒ Effectively communicate the results of business applications analyses.
Grading Scheme:
4 Case studies 25%
Presentation of a case study 10%
Midterm 20%
Comprehensive Final Exam 45%

Total 100%

Final course letter grade assignments:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93% and above</td>
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<tr>
<td>B-</td>
<td>78% - 80%</td>
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<tr>
<td>A-</td>
<td>89% - 92%</td>
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<tr>
<td>C</td>
<td>70% - 77%</td>
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<tr>
<td>B+</td>
<td>86% - 88%</td>
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<tr>
<td>B</td>
<td>81% - 85%</td>
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<tr>
<td>F</td>
<td>below 70%</td>
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Assignments:
- There will be four mandatory group case studies that are directed towards business applications. Case studies are a very important component of the learning process, and each case must be turned in no later than its due date. The case studies must be submitted in groups of three students.
- Grading for the course will be based on total points earned by the end of the course. There will be one midterm and a final comprehensive exam. Whole letters, with plus and minus, will be assigned as the final course grades.
- Most of the course material is available on-line from my course website and is accessible for download over the Internet. It is the student’s responsibility to have reliable and adequate Internet connectivity and access.
- For technical help with your personal computing systems or using Blackboard, call the GMU support center at 703-993-8870 or send e-mail to courses@gmu.edu.
- Download the pertinent course documents before class and well before exams. Bring these to class as your notes for annotation.
- The course website is an electronic medium to facilitate the transfer and dissemination of the course content. It is not a replacement or substitute for attending class.

Attendance Policy
Attendance in this class is highly recommended in order to be successful in learning the course content. My past experiences as well as my expectations are that in order to be successful in this class, attendance is essential. The student is solely responsible for all assignments and material presented in class even if missed due to absence.

Make up Exams
Notice will be given before each exam; if you cannot take the exam at the designated time, you must make arrangements with the instructor before the exam is given. Exams may be made up only under extreme emergencies AND at the sole discretion of the instructor. A penalty for lateness may be assigned. Missed exams will be assigned a score of zero.
Disability
All academic accommodations due to disability should be arranged through the Office of Disability Service (ODS). If you are a student with a disability and you require academic accommodations, please contact the ODS (http://ods.gmu.edu/) at 703-993-2474. I will cooperate fully with the ODS to accommodate all student’s special needs.

Honor Code
Students are obligated to strict adherence to the University honor system and code, as described in the 2011-12 George Mason University catalog.

TENTATIVE COURSE SCHEDULE

Some sections in text chapters will be skipped, as announced. Some material not contained in the text may be presented in class, as noted. The exam dates and the specific material coverage for each exam will be announced in class.
For other important dates, consult the Spring 2012 Schedule of Classes for the Academic Calendar or visit: http://registrar.gmu.edu/calendars/2012Spring.html
The tentative list of topics is given below. The list below follows the basic order and coverage of topics in the required text. The list is subject to change during the semester.

Tentative dates for assignments:
Group Case study #1 – 2/20/2012
Group Case study #2 – 3/19/2012
Group Case study #3 – 4/2/2012
Group Case study #4 – 4/23/2012

- The Midterm is scheduled to be on Monday, 3/26/2012
- The Final Exam is scheduled to be on Monday, 5/14/2012

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Reading</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Course, review the Syllabus</td>
<td>Chapter 1</td>
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<td></td>
<td>The Operations Function</td>
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<td>2</td>
<td>Operations and Supply Chain Strategy</td>
<td>Chapter 2</td>
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<td>Product Design</td>
<td>Chapter 3</td>
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<td>3</td>
<td>Managing Quality</td>
<td>Chapter 8</td>
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<td>Quality Control and Improvement</td>
<td>Chapter 9</td>
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<td>Discussion of the book:</td>
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<td>Building High Performance Government through Lean Six Sigma:</td>
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<td>A Leader's Guide to Creating Speed, Agility, and Efficiency</td>
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<td>4</td>
<td>Process Selection</td>
<td>Chapter 4</td>
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<td>Service Process Design</td>
<td>Chapter 5</td>
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<td>5</td>
<td>Process Flow Analysis</td>
<td>Chapter 6</td>
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<td>6</td>
<td>Lean thinking and systems</td>
<td>Chapter 7</td>
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<td>7</td>
<td>Midterm – Monday, 3/26/2012</td>
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<tr>
<td>Chapter</td>
<td>Topic</td>
<td>Notes</td>
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<td>8</td>
<td>Supply Chain Management</td>
<td>Chapter 10</td>
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<td>9</td>
<td>Waiting Lines (Queuing Theory)</td>
<td>Tech. Note</td>
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<td>10</td>
<td>Forecasting</td>
<td>Chapter 11</td>
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<td>11</td>
<td>Capacity Planning</td>
<td>Chapter 12</td>
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<td>12</td>
<td>Theory of Constraints.</td>
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<td>Discussion of the novel: <em>The Goal: a process of ongoing improvement, by Eliyahu Goldratt and Jeff Cox.</em></td>
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<td>13</td>
<td>Scheduling Operations</td>
<td>Chapter 13</td>
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<td>Project Planning and Scheduling</td>
<td>Chapter 14</td>
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<td>14</td>
<td>Independent-Demand Inventory</td>
<td>Chapter 15</td>
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<tr>
<td>15</td>
<td>Maintenance of Systems</td>
<td>Tech. Note</td>
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<tr>
<td></td>
<td>Review for Final Exam</td>
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<tr>
<td></td>
<td><em>Comprehensive Final exam - Monday, 5/14/2012</em></td>
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**Semester concludes – Have a great summer!**