Instructor: Dr. Michael Naor, Assistant Professor of Operations Management
Office: Enterprise Hall (ENT), Room 153
Office Phone and Voice Mail: (703) 993-4756.
Office Hours: Tuesday 1:30 - 2:30 PM and Wednesday 5:30 – 6:30 PM,
Students are most welcome by appointment at other times too.
e-mail: mnaor@gmu.edu

Required Textbook: Jay Heizer and Barry Render, Principles of Operations Management,
ISBN-10: 0136114466

Note: The text is a required reading but it is not a substitute or replacement for classroom instruction.

Course Website: http://courses.gmu.edu/
For login instructions: http://www.irc.gmu.edu/CE6Transition/studentorientation.pdf

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 ‘Pure black and white’ print option to save ink and 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)

Class Sessions: Lecture Section 004 – Class meets every Tuesday and Thursday 3:00 – 4:15 PM, Innovation Hall, in Room 204.

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.
Prerequisites:
Grade of “C” or better in OM 210, and sophomore standing. Prerequisites are strictly
enforced by the Office of Academic Advising.
This course requires a minimum grade of C to satisfy SOM degree requirements, and
students will not be permitted to make more than three attempts to achieve a C or higher in
this course. Effective Fall 2010, registration in this course will be prohibited beyond three
attempts that resulted in a grade lower than C. If you have questions about this policy,
please see an academic advisor in ENT 008.

Learning Goals for the ISOM Major, students will be able to:
(note: Goals addressed in this course are highlighted in bold text)
1. Apply knowledge of information technology and business functions to understand
   its application in assessing, designing and improving business processes.
2. Develop data organization, storage and processing solutions to support organizational
   needs for information management. They will also have the option of developing skills in
   the area of supporting decision making through business intelligence solutions.
3. Use knowledge of computer networks as part of the IT solutions for improving business
   processes. They will also have option of developing more advanced skills in the areas of
   network and security.
4. Effectively manage information technology projects.
5. Understand the overall systems development life cycle and be able to recommend IT
   system solutions accordingly. They will also have option of learning appropriate
   development tools to develop prototype of IT solutions for business management.

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 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.

Course requirements and grading:
• 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.

- Grading for the course will be based on total points earned by the end of the course. Points will be derived from two Mid-Term Exams, Final Exam, three homeworks, and a case study. All exams given in class are closed book. Use of the textbook, class notes, etc., is prohibited unless otherwise stated by me. Whole letters, with plus and minus, will be assigned as the final course grades.

- Final course letter grade assignments:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93% and above</td>
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<tr>
<td>A-</td>
<td>89% - 92%</td>
</tr>
<tr>
<td>B+</td>
<td>87% - 88%</td>
</tr>
<tr>
<td>B</td>
<td>82% - 86%</td>
</tr>
<tr>
<td>B-</td>
<td>80% - 81%</td>
</tr>
<tr>
<td>C+</td>
<td>78% - 79%</td>
</tr>
<tr>
<td>C</td>
<td>70% - 77%</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69%</td>
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<tr>
<td>F</td>
<td>below 60%</td>
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Two Mid-Term Exams (28% each exam) = 56%
Final Exam = 28%
Three Homeworks (4% each homework) = 12%
Case Study = 4%

Total = 100%

Learning Tools of the Course
Primary learning tools of the course include the following:

- Lectures - My teaching philosophy is dominated by the adage that ‘learning is an active process’. Lectures are ‘interactive’ in the sense that a constant questioning process takes place with responses expected. To be successful in learning the concepts, you must be actively engaged in the material.

- Exams - Two (2) mandatory, midterm exams and a Final Exam will be given, as announced. The exams will be comprehensive of the topics they cover. Exams are based upon the class lectures, textbook material, and discussion of the material covered during the classes. **All examinations are to be by individual effort as they will be graded.** NO collaboration of any kind is permitted. See the honor code paragraph below. Any collaboration will be treated as an Honor Code violation.

- Homework - To be successful in this course, homework will be an integral part of learning the course material. It is in the best interest of the student to complete each and every homework assignment. Homework is for the student’s benefit; it is a diagnostic tool by which the student may assess their understanding and performance. Failure to do so will adversely affect performance, and will negatively impact exam and course grades. Avoid falling behind. **There will be three (3) mandatory individual homework assignments.** Homework assignments will be posted on the website. Homework problems, both their assignment and solution, are the sole responsibility of the individual student.
Case Study – There will be one (1) mandatory written case study that is directed towards business applications.

Connectivity and Computer Skills:
- Every GMU student is provided with e-mail account. I sometimes e-mail course announcements to the class list. It is the student’s responsibility to activate and routinely check their GMU e-mail account.
- 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. This includes the use of GMU computers available on campus. Further, the student must be familiar with Internet browsers and navigation.
- For technical help with your personal computing systems or using BlackboardCE6, call the GMU support center at 703-993-8870 or send e-mail to courses@gmu.edu
- The student must be familiar with the basics of the recent versions of MS Office products, especially MS Word, PowerPoint, and Excel.
- Download the pertinent course documents before class and well before exams and assignment due dates. 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 ODC at 703-993-2474. I will cooperate fully with the ODC 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 2012-13 George Mason University catalog.

Class Etiquette
Be courteous to and respectful of others in class!
Topics and 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 Fall 2012 Schedule of Classes for Academic Calendar (http://registrar.gmu.edu/calendars/2012Fall.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.**

<table>
<thead>
<tr>
<th>Course Topics</th>
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<tbody>
<tr>
<td>Chapter 1</td>
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<tr>
<td>Chapter 2</td>
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<tr>
<td>Chapter 3</td>
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*Class is cancelled on Tuesday 9/25/2012*

| Chapter 4 | Forecasting |

**Midterm 1: October 16**

| Chapter 6 | Managing Quality |
| Supplement to Chapter 6 (Statistical Process Control) |
| Chapter 7 | Process Strategy and Sustainability |
| Supplement to Chapter 7 – Only the section on the Theory of constraints (p. 291) |

| Chapter 11 | Supply Chain Management |
| Supplement to Chapter 11 (Outsourcing as a Supply Chain Strategy) |

**Midterm 2: November 13**

| Chapter 12 | Inventory Management |
| Chapter 16 | JIT and Lean Operations |
| Chapter 17 | Maintenance and Reliability |

**Final Exam: Thursday, 12/13, 1:30-4:15 PM**

Semester concludes – Happy Holidays!