Instructor: Professor J.B. Mazzola  
Friday 350A  
704-687-7034  
jmazzola@uncc.edu

Office Hours: Center City Building: Tuesdays, 3:15 – 4:15, Wednesdays, 4:30 – 5:30,  
by appointment. Additional times also available by appointment.

Course Material:  

Course Overview:  
Operations is the study of how organizations transform, produce, and deliver value to the customer, client, or user of the product or service created by the organization. It involves the planning, organizing and management of resources to produce goods and services so as to meet the strategic goals of the organization. The operations (or production) function is an integral part of virtually every organization; the well-trained MBA must be familiar with and conversant in the myriad issues arising in this functional area. This course is devoted to the study of the operations function – specifically, understanding how to manage the provision of goods and services both effectively and efficiently, as well as understanding how to innovate processes so that they can fulfill (or surpass) the ever-increasing demands for higher levels of performance.

Course Objectives: The objectives of this course are:

i) introduce the functional area of production/operations and to increase awareness of how production/operations interface with the other functional areas of an organization.

ii) understand the strategic role of the operations function as a key factor in determining an organization’s ability to perform well in the competitive global marketplace.

iii) become familiar with the various challenges (issues and problems) that occur in the management of manufacturing and service operations, and to understand the terminology, modeling, and methodology that often arise in the handling and resolution of these challenges.

iv) become familiar with recent technological advances that directly affect operations management.

v) consider global management issues as well as social and ethical issues that arise with respect to managing a firm’s operations.
Course Pedagogy:
This course makes extensive use of the Case Method of teaching, which is based on the Socratic Approach to teaching and learning. The use of this method is consistent with the adult learning model which asserts that “adults retain only 10% of what they read and 20% of what they hear, but 70% of what they say and 90% of what they do.” Your active participation in class discussion will contribute not only to what you learn but also to the overall breadth and depth of the knowledge that is experienced in class. It is therefore essential that you attend class and that you thoroughly prepare each case and assigned article in advance of each class session. Class participation constitutes a significant percentage of your final grade, and your contributions to class discussion will be assessed on the basis of the quality, rather than the quantity of your comments.

Class Web Site:
You are **required** to access regularly the Moodle class web site (https://moodle.uncc.edu/), and in particular, **before** each class. In addition to containing helpful information, Moodle will be used to communicate information on assignments, changes to the syllabus, and other announcements of general interest.

Diversity and Inclusion:
The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

Grading:
The evaluation of student performance in the course will be based upon the following components:

1. Class Participation 25%
2. Midterm Exam 25%
3. Group Assignments 20%
4. Final Exam (in-class) 30%

where the percentages indicate the target weights to be associated with these components in the determination of the final course grade. **Note**, however, that acceptable performance in each of these components is a necessary condition for successful completion of the course. The instructor reserves the right to modify these requirements and weights during the course of the term.

Class participation refers to: regular class attendance, contributing positively, regularly, and significantly to class discussion, being well-prepared for class, as well as the timely and accurate completion of assigned homework and exercises. While homework assignments will not be collected regularly, on some occasions students may be asked to turn in their assignments to be graded.

There will be an in-class quiz on *The Goal* on **Wednesday, March 14**. This will be an open-book, open-notes quiz that will test your understanding of the concepts brought out in *The Goal*. The quiz will be subject to a time constraint, so even though it is open-book, if you have not read through the book carefully, it is highly unlikely that you will do well on it. The grade on this quiz will constitute 5 percentage points of the Final Exam (which is worth a total of 30 percentage points).
Group Assignments:

To strengthen your ability to work effectively in a group setting and also to encompass within the requirements of the course assignments that either through the magnitude of their scope or the effort and skills required to complete them might easily surpass the capability of an individual, you will be required to complete two group assignments. You will need to form a group (team) of 4 or 5 students consisting of students enrolled in this section of this course. **Groups may not have fewer than 4 members or more than 5 members.** In keeping with diversity as one of the core principles of the Belk College, individual group compositions should reflect the diversity of the class. It is also suggested that groups be diverse with respect to group members tenure in the MBA program. If necessary, as the instructor, I can assist in the formation of the groups. The groups will need to be formed and their proposed composition communicated by e-mail to me by **Thursday, January 19, 5:00 pm.** Designate someone within your group to be the “Group Communicator.” The group communicator will be responsible for communicating with me, and will be my contact person for communicating with your group.

The first group assignment will be a written case analysis of the case: “The Executive Shirt Company, Inc” and is **due at the beginning of class on Wednesday, February 15.** The second group assignment is an 8-10 page paper (typewritten, double-spaced) on a current operations management topic of interest to global business managers. There are a number of topics that continue to appear in the business press; e.g., global supply chain management – outsourcing and offshoring, Enterprise Resource Planning, mass customization, revenue management (yield management), theory of constraints, vendor managed inventory, lean six sigma, and so forth. We will discuss some of these topics briefly in class (and in the assigned readings). This assignment, however, will provide you and your group with the opportunity to study one of these topics in greater depth.

Your group should select a topic that is one of mutual interest among the group members; ideally, it would be a topic that is currently of direct relevance to one or more of the group members and their companies. There are three main requirements for this group assignment. The paper must be original to the group, the standard rules of citation must be employed, especially in regard to information obtained from the internet (there has been, unfortunately, an abundance of cases of internet-based plagiarism on college campuses across the country); it is essential that proper attribution be made to the work of others and that all references be properly cited. The second requirement is that the paper must **not** be based on, nor may it overlap with, a paper that was prepared (or that is being prepared) for another course at UNC Charlotte. Many of the relevant topics also arise in other MBA and graduate courses; however, your report must be independent from the work/assignments done for other classes; that is, it may not be drawn from nor may it draw from (either in part or in total) another assignment or paper that has been, is currently, or will be submitted to meet the requirements of another course by any individual or individuals within your group.

The third requirement is that the group-paper topic must be approved by me before your group begins work on it (the reasons for this are to ensure: that the scope of the topic is consistent with the nature of the assignment; that the topic complements the set of topics that we will cover in class; and that there is sufficient breadth of topic coverage among the various groups in the class). The topic must be proposed and approved on or before **Thursday, March 22** (therefore, it is strongly recommended that you submit your proposal by **Thursday, March 15**). Group Assignment 2 is due on or before the beginning of class on **Wednesday, April 25.** It should be submitted electronically to me as a pdf file. The group reports will be posted on the course web site so that others in the class may, if they wish, access and download them for their own reference.

The instructor will assign a grade to each group assignment and average the grades to determine an overall “group assignment” grade for each group. A percentage (0% to 100%) of this assigned grade will then be assigned independently to each group member by the instructor using data collected in group peer evaluations, which each group member will be asked to fill out at the end of the semester. For example,
suppose that a group with 4 members has completed and submitted both assignments. Of the 4 members, two worked very hard on both assignment, one contributed only half-heartedly, and the fourth member decided that watching *American Idol* was more valuable than contributing to the group and did not contribute anything. Despite the Herculean efforts of the two hard-working group members, the group assignment grades averaged 75% (and could easily have been a 90% plus effort, if the 37 – 45% of total group capacity had not been lost to free-riding). In the group peer evaluations, the contributions of the fully contributing members are acknowledged and assessed at 100% each, that of the third member is assessed at 50%, and that of the *Idol* fan is assessed at 0%. Then, the first two group members would receive group project grades each of 75% the remaining group members would receive group project grades of 37.5% and 0%, respectively. **Important implication:** free-riding has the potential to diminish the quality of the overall project. Another core value of the Belk College is excellence. There is no room in an excellent program for free-riding. Your group should actively manage this from the outset. Finally, each member of the group is both expected and required to contribute to each assignment. Dividing up the workload by assignment, for example, is antithetic to the value and purpose of this group exercise.

**Academic Integrity:**

> “Integrity and the credibility it produces underlie successful leadership and are fundamental to success in life. It is everyone’s most valuable asset and should be protected at all cost.”

George G. Daly, Former Dean: McDonough School of Business, Georgetown University; Stern School of Business, New York University; College of Business Administration, University of Iowa.

Integrity is another core value of the Belk College. Students are responsible for knowing and observing the UNC Charlotte Code of Student Integrity (http://www.legal.uncc.edu/policies/ps-105.html). All work on exams and quizzes is to be done on an *individual basis*. This may also be extended to certain assignments, and will be specified as such in class. In a course that uses the case method, class discussion, and course projects, there is always the possibility and temptation to consult with someone who has had the course (or class) previously or to consult case/class notes or project reports from another section or from a previous year or semester or that might be available on the internet. This practice is *strictly prohibited* under all circumstances and unequivocally constitutes a *violation* of the Code of Student Integrity. Obviously, group projects involve cooperative effort. Everyone however, is *required* to contribute to the effort for this class, and individual contributions will be evaluated through group peer review.

**Recording of class sessions is prohibited.**

The content of class lectures and discussions are protected by copyright law. The recording (audio or video) of class lectures and discussions is expressly prohibited.
# MBAD 6141 – Operations Management

## Tentative Syllabus

**Note:** There are likely to be additional required readings that are not listed in the syllabus and that will also be assigned during the course of the semester. It is important to check the class (Moodle) web site regularly to keep apprised of assigned articles and homework problems, as well as revisions to this syllabus.

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<tr>
<th>Session</th>
<th>Date</th>
<th>(Subject &amp; Assignment)</th>
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| 1       | Jan. 11| Introduction to Operations Management and Processes  
**Case – read and prepare for class discussion (C): “Benihana of Tokyo”**  
This case, despite its vintage, remains as one of the most popular cases in the Harvard Business School collection and serves as an excellent introduction to operations management. Prepare this case for class discussion (some thought questions follow). What are the key ingredients in Benihana’s successful recipe? How does Benihana differ from a typical restaurant (compare the operating statistics of Benihana Chicago with those of a typical restaurant such as in Exhibit 1)? How does this restaurant operate? What are your concerns for Benihana’s future?  
**Lecture and class discussion (L):** Processes and their strategic role |
| 2       | Jan. 18| Process Analysis and Service Operations  
**C: “Kristen’s Cookie Company”**  
Unlike all of the other cases in this course, you only need to read this case carefully and familiarize yourself with the background. This is an easy case that is designed to introduce basic process characteristics. We will develop together in class answers to the following questions (this will be done in a lecture-discussion format, so there is no need to answer these questions prior to class). Develop a process-flow diagram. How long does it take to fill a rush order? How many orders can be filled in a (4-hour) night (ignoring system start-up and shut-down effects). Does the capacity of the system depend on the size of the order? What happens if your try to run this system yourself without a roommate. How might you improve the system?  
**L:** Process Analysis |
| 3       | Jan. 25| Waiting Lines and Variability  
**C: “University Health Services: Walk-in Clinic”**  
Evaluate the performance of the Walk-in Clinic. Are the waiting times now acceptable? Why are “walk-in appointments” a problem? What should Ms. Angell do about them, if anything? What other actions, if any, would you recommend to Ms. Angell?  
**L: Introduction to Queueing (Waiting line) Theory |
| 4       | Feb. 1 | Capacity Management – More on Queueing and the Learning Curve  
**C: “Global Financial Corp.”**  
The manager of a loan processing office is faced with the challenge of reducing turnaround time or face the likelihood of losing business to a
competitor. How is the Bakersfield Office doing? What are the causes of its problems? What is the projected capacity utilization of each activity? If you were in Ms. Rodriquez’s position, what would you recommend that GFC do?

Note: Assume that the data provided in the case (e.g., Appendix C) for the processing times of the Evaluation and Analysis step applies to the two-person team operating as a single unit.

L: The Learning Curve

Feb. 8
Managing Inventory I
L: Newsvendor model
L: EOQ Model

Feb. 15
Managing Inventory II
L: Stochastic inventory and safety stock

Article - read and prepare for class discussion (A): “Stock-Outs Cause Walkouts,” HBR.
L: Productivity and Work Measurement

Feb. 22
C: “L.L. Bean, Inc.”
How does L.L. Bean use past demand data and a specific item forecast to decide how many units of that item to stock? What item costs and revenues are relevant to deciding how many units of that item to stock? What information should Scot Sklar have available to help determine the forecast for a particular style of men’s shirt that is a new catalog item? How would you address Mark Fasold’s concern that the number of items purchased usually exceeds the number forecast?
Review

Feb. 29
Midterm Exam (open book, open notes, in class)

Mar. 7
Spring Break

Mar. 14
Quiz on The Goal (Open book, open note, but only 20 minutes), followed by class discussion of the key principles
L: Dependent Demand Inventory (MRP)

Mar. 21
L: Lean Production (Toyota Production System, JIT)
L: Introduction to Quality Management

Mar. 28
Managing Quality
L: Quality Management, Six Sigma, Lean Six Sigma

Apr. 4
Quality and Innovation
A: “Driving operational innovation using Lean Six Sigma,” IBM Global Business Services
Supply Chain Management I
“The Beer Distribution Game”
<table>
<thead>
<tr>
<th>Date</th>
<th>Page</th>
<th>Topic</th>
<th>Reading Material</th>
<th>Notes</th>
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<tbody>
<tr>
<td>13 Apr. 11</td>
<td>13</td>
<td>Supply Chain Management II</td>
<td>A: “What is the Right Supply Chain for Your Product,” HBR</td>
<td>C: “HP DeskJet Printer Supply Chain”</td>
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<td>What are the characteristics of the industry, the product, the supply chain? What has contributed to the so-called “inventory/service” crisis? How would you evaluate the various alternatives available to Brent Cartier to address the inventory and service problem?</td>
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<td>14 Apr. 18</td>
<td>14</td>
<td>Operations Strategy</td>
<td>A: “The Power of Virtual Integration: An Interview with Dell Computer’s Michael Dell,” HBR.</td>
<td>C: “The Morrison Company” Identify and Assess the operations problems occurring at The Morrison Company. Explain the differences between the production processes for the pharmaceutical product line compared with those of the retail product line. Why are they different? What recommendations would you offer Shauna Breen about how to address those issues? Be specific about any policies or organizational changes you propose.</td>
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<td>15 Apr. 25</td>
<td>15</td>
<td>Process Reengineering</td>
<td>A: “Reengineering Work: Don’t Automate, Obliterate,” HBR.</td>
<td>Course Wrap-up</td>
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<td>May 9 Final Exam 5:00pm – 7:30 pm</td>
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