

University of Florida
Warrington College of Business Administration
Department of Information Systems & Operations Management
Online 2-Year MBA Program of 2017

Term 5: MAN 5501 - Operations Management

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Course Description

It is a well-recognized fact that managing operations effectively led to early successes of our major industries (such as steel, automobiles, and electronics). Given our leadership in the quality and efficiency of our operations processes, a sense of complacency pervaded the top management of several corporations. Thus, the operations function was relegated to the “back room” and considered to be *reactive rather than proactive*. The repercussions of this low prioritization of operations were felt in the early 1970's and through most of the 1980's when U.S. products and services were perceived to be inferior to those of the offshore competitors in Europe and the Far East. In fact, these competitors gained a significant market share in the US (one of the largest and richest markets in the world) and this still exists to date. Reactions to such a situation were at first, disorganized and fragmented. For example, certain companies simply copied the practices of the offshore competitors (e.g., JIT) without evaluating their applicability while others focused on convincing the customers that their products were still the “best” (“Quality is Job 1”). Over time, these efforts have been coordinated and implemented with more success. In fact, in today's business climate, one of the key goals of all organizations is to continually improve the productivity, quality, and efficiency of their operations processes.

This course will examine key managerial decisions in two complementary areas: Process Management and Supply Chain Management. In Process Management (PM), we will focus on: (a) describing relationships between in-process inventory, cycle time, and throughput; and (b) managing and planning process capacity. In Supply Chain Management (SCM), we will examine: (a) the benefits of coordinated decision making in supply chains; (b) the use of consumer segmentation to effectively increase capacity utilization (and hence, ROI) in key industries; and (c) how service levels and lead times in a supply chain can be maintained using an order-up-to Inventory model. We will start and end the course with two online simulation exercises.

Course Objectives

This course provides an introduction to Operations and Supply Chain Management. More specifically, the objectives of this course are: (a) To introduce students to the basic concepts in OM; (b) To familiarize students with the terminology in the area; and (c) To expose students to some of the more common decision making tools used by contemporary operations and supply chain managers. Given the nature of the Online MBA Program, you should be prepared to view the lectures to make sure you understand the material. You will also be required to analyze two short cases; submit four assignments; and participate in two online simulation exercises. Finally, I hope that during the course of the semester all of you will use EXCEL, an extremely valuable tool in the context of our course material.

Instructional Materials

The following instructional materials will be used during the course.

- Cachon, Gérard, and Terwiesch, Christian, *Matching Supply and Demand – An Introduction to Operations Management*, McGraw-Hill Irwin, 3rd Edition, 2012.
- *Course Packet* which contains copies of the power point slides for each topic covered in the course as well as assignments, and cases.

Team-based Deliverables

- Simulation Exercise 1: This is a team-based activity. More information on this deliverable will be made available on the first day of class. Once this exercise is completed (online completion), each team should submit a report. Please consult the document titled “Team Report on the Root Beer Simulation (Deliverable)” included in your course pack and on CANVAS which provides guidelines for preparing this report.
- Cases will be analyzed in your assigned teams. A grading scale for each case are included in the course packet and also included on CANVAS.
 - Case 1: When analyzing case 1, the write-up should be a maximum of 3 pages. Detailed instructions on what to include in a case report for this case are given on page 6 of this course outline. Questions which must be addressed are included in the course packet and on CANVAS. Each team submission for this case report should be a single Word or pdf file (with all relevant analysis appended as exhibits) within this file.
 - Case 2: For case 2, the questions to guide the analysis are included in the case itself (included in the course packet). In addition, on Canvas, you will also be able to download Excel workbooks which should facilitate an analysis of the case. Each team submission for this case should be a single Word, Excel, or pdf file which includes answers to all questions posed in the case along with relevant calculations to support these answers.
- Schedule of Team Deliverables

Description	Module	Due Date (Time)
Simulation Exercise 1 (online completion)	Module 0	December 10, 2016 (11:59 pm)
Report on Simulation Exercise 1	Module 0	December 11, 2016 (11:59 pm)
Report on Case 1	Modules 1 and 2	January 15, 2017 (11:59 pm)
Report on Case 2	Module 5	March 5, 2017 (11:59 pm)

Individual Deliverables

- Assignments: These are problem solving assignments on different modules of the course and must be worked on individually with *no collaboration with your peers or other sources*. Each assignment

submission must be a single Word, Excel, or pdf file containing answers to all the questions for the assignment.

- Peer Evaluation: Each student will be required to assess the performance of their team members using the form provided on Canvas. This is a required submission and the form provided must be filled out and submitted.
- Simulation Exercise 2: Details relating to this exercise will be made available approximately a week before the course ends.
- Schedule on Individual Deliverables

Description	Module	Due Date (Time)
Assignment 1	Module 2	January 22, 2017 (11:59 pm)
Assignment 2	Module 3	February 12, 2017 (11:59 pm)
Peer Evaluation	Not Applicable	March 5, 2017 (11:59 pm)
Assignment 3	Module 6	March 19, 2017 (11:59 pm)
Assignment 4	Module 7	April 9, 2017 (11:59 pm)
Simulation Exercise 2	Module 8	April 22, 2017 (in-class)

Course Discussion Boards

Participation on these boards is optional and for each topic area, there is a separate discussion board. The only request I have is depending on the topic area coverage, questions (if any) are posted on the appropriate board. The following discussion boards are set-up for the course:

Description	Start Date	End Date
Course Discussion Board	Monday December 5 2016	Saturday, April 22, 2016
Simulation Exercise 1	Monday December 5 2016	Sunday, December 11, 2016
Case 1	December 12, 2016	January 15, 2017
Assignment 1	December 12, 2016	January 22, 2017
Assignment 2	January 23, 2017	February 12, 2017
Case 2	February 20, 2017	March 5, 2017
Assignment 3	March 6, 2017	March 19, 2017
Assignment 4	March 20, 2017	April 9, 2017
Simulation Exercise 2	April 10, 2017	April 22, 2017

Grading Policy

The course grades will be determined ON A CURVE by assigning the following weights to the case analysis (team), individual assignments, and two simulation exercises (team and individual).

- Simulation Exercise 1 Performance (Team) 5%
- Simulation Exercise 1 Report (Team) 5%
- Case 1 (Team) 10%
- Assignment 1 (Individual) 12.5%
- Assignment 2 (Individual) 12.5%
- Case 2 (Team) 10%
- Peer Evaluation (Individual) 5%
- Assignment 3 (Individual) 12.5%
- Assignment 4 (Individual) 12.5%
- Simulation Exercise 2 (Individual) 15%

University Policies

Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

Honor Code: It is critical that each student familiarize himself/herself with the university honor code which can be reviewed at: <http://www.registrar.ufl.edu/catalog/policies/students.html>. There is ZERO tolerance for violations of this honor code.

Getting Help

For technical difficulties with E-learning in Sakai, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Library Help Desk support

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

Course Schedule (subject to change)

Sunday, December 4 2016

Course outline/content; Introduction to the course.

Text: Chapter 1.

In-Class Simulation Exercise 1

Module 0 - Simulation Exercise 1

December 5-9, 2016

- Since you have already concluded the “Individual Player” version of the simulation during our first class on Sunday, December 4 2016, review the course pack slides on Module 0 – Simulation Exercise 1. *There is no recorded lecture for these slides.*
- Read “The Bullwhip Effect in Supply Chains” (available in Course packet)

Saturday, December 10, 2016 (11:59 pm)

Complete the Team based Simulation Exercise 1 (online completion).

Sunday, December 11, 2016 (11:59 pm)

Deadline for Deliverable (team): A report on Simulation Exercise 1. Please consult the document titled “Team Report on Simulation Exercise 1 (Deliverable)” included in your course pack and on Canvas which provides guidelines for preparing this report.

Process Management

Monday, December 12, 2016

Review Lecture Segment “01_00_IntroductiontoModules1-3.”

Module 1 – A Macro/Micro Perspective on Processes

Text: Chapters 2 and 3.

December 13-23, 2016

Suggested sequence:

- Review Lecture Segment "01_01_Macro_MicroPerspectiveonProcesses."
- Review Lecture Segment "01_02_Macro_MicroPerspectiveonProcesses."
- Review Lecture Segment "01_03_Macro_MicroPerspectiveonProcesses."

December 24, 2016 – January 1, 2017: BREAK – WISHING ALL A WONDERFUL HOLIDAY SEASON!

Module 2 – Managing Process Capacity

Text: Chapter 7.

January 2-14, 2017

Suggested sequence:

- Review Lecture Segment "02_01_Module2_CapacityManagement_Lecture2.1."
- Review Lecture Segment "02_02_Module2_CapacityManagement_Lecture2.2."
- Review Lecture Segment "02_03_Module2_CapacityManagement_Lecture2.3."
- Review Lecture Segment "02_04_Module2_CapacityManagement_Lecture2.4."
- Review Lecture Segment "02_05_Module2_CapacityManagement_Lecture2.5."

Sunday, January 15, 2017 (11:59 pm)

Deadline for Case 1 Report Deliverable (team): Submit a written case report (a SINGLE file in Word or pdf format with all supporting analysis pasted into this single file) for the case. The case and assignment questions (along with a grading scale) are included in your course packet and available on CANVAS.

Sunday, January 22, 2017 (11:59 pm)

Deadline for Assignment 1 Deliverable (individual): Submit a SINGLE file in Word, Excel, or pdf format with answers to all questions for assignment 1. These questions are based on material covered in Modules 1 and 2. The assignment questions (along with a grading scale) are included in your course packet and available on Canvas.

Module 3 – Planning Process Capacity

Text: Chapters 8 and 9.

Supporting Materials: EXCEL file “capacityplanningtemplate.xls.” This file is used extensively to derive the numerical results for the models we study in this module and is available on Canvas.

January 23 – February 11, 2017

Suggested sequence:

- Review Lecture Segment "03_01_Module3_CapacityPlanning_Lecture3.1.”
- Review Lecture Segment "03_02_Module3_CapacityPlanning_Lecture3.2.”
- Review Lecture Segment "03_03_Module3_CapacityPlanning_Lecture3.2.”
- Review Lecture Segment "03_04_Module3_CapacityPlanning_Lecture3.4.”

Sunday, February 12, 2017 (11:59 pm)

Deadline for Assignment 2 Deliverable (individual): Submit a SINGLE file in Word, Excel, or pdf format with answers to all questions for assignment 2. These questions are based on material covered in Module 3. The assignment questions (along with a grading scale) are included in your course packet and available on Canvas.

Module 4 - The Newsvendor Problem – A Detour!

Discussion Board – Newsvendor Problem: February 13-19, 2017.

Supporting Materials: EXCEL file “normaldistributions.xls.”

Text: Chapter 12.

February 13-19, 2017

Suggested sequence:

- Review Lecture Segment "04_01_Module4_NewsvendorProblem_Lecture4.1.”
- Review Lecture Segment "04_02_Module4_NewsvendorProblem_Lecture4.2.”
- Review Lecture Segment "04_03_Module4_NewsvendorProblem_Lecture4.3.”

Supply Chain Management

Monday, February 20, 2017

Review Lecture segment “05_00_IntroductiontoModules5-8.”

Module 5 – Supply Chain Coordination

Text: Chapter 17.

February 21 - March 4, 2017

Suggested sequence:

- Review Lecture Segment "05_01_Module5_SCCoordination_Lecture5.1.”
- Review Lecture Segment "05_02_Module5_SCCoordination_Lecture5.2.”
- Review Lecture Segment "05_03_Module5_SCCoordination_Lecture5.3.”
- Review Lecture Segment "05_04_Module5_SCCoordination_Lecture5.4.”

Sunday, March 5, 2017 (11:59 pm)

Deadline for Case 2 Deliverable (team): Submit a written analysis which addresses all the questions in the case (a SINGLE file in Word, Excel or pdf format with all supporting analysis pasted into this single file). The case and assignment questions (along with a grading scale) are included in the case which is in your course packet.

Sunday, March 5, 2017 (11:59 pm)

Deadline for Peer Evaluation: Submit the peer evaluation form available on Canvas.

Module 6 – Revenue Management

Text: Chapter 16.

March 6–18, 2017

Suggested sequence:

- Review Lecture Segment "06_01_Module6_RevenueManagement_Lecture6.1."
- Review Lecture Segment "06_02_Module6_RevenueManagement_Lecture6.2."
- Review Lecture Segment "06_03_Module6_RevenueManagement_Lecture6.3."

Sunday, March 19, 2017 (11:59 pm)

Deadline for Assignment 3 Deliverable (individual): Submit a SINGLE file in Word, Excel, or pdf format with answers to all questions for assignment 3. These questions are based on material covered in Modules 4 and 6. The assignment questions (along with a grading scale) are included in your course packet and available on Canvas.

Module 7 – Service Levels and Lead Times in Supply Chains

Text: Chapter 14.

March 20 – April 8, 2017

Suggested sequence:

- Review Lecture Segment "07_01_Module7_ServiceLevelsandLeadTimesinSupplyChains_Lecture7.1."
- Review Lecture Segment "07_02_Module7_ServiceLevelsandLeadTimesinSupplyChains_Lecture7.2."
- Review Lecture Segment "07_03_Module7_ServiceLevelsandLeadTimesinSupplyChains_Lecture7.3."
- Review Lecture Segment "07_04_Module7_ServiceLevelsandLeadTimesinSupplyChains_Lecture7.4."
- Review Lecture Segment "07_05_Module7_ServiceLevelsandLeadTimesinSupplyChains_Lecture7.5."

Sunday, April 9, 2017 (11:59 pm)

Deadline for Assignment 4 Deliverable (individual): Submit a SINGLE file in Word, Excel, or pdf format with answers to all questions for assignment 4. These questions are based on material covered in Module 7. The assignment questions (along with a grading scale) are included in your course packet and available on Canvas.

Module 8 – Simulation Exercise 2

More information will be available on this exercise starting April 10 2017. It will be an in-class exercise which will be completed individually when all of you return to campus on Saturday, April 22, 2017.

Instructions for Case Analysis Write-Up for Case 1

1. *General*

Write the paper as if you were an external consultant writing a report to an extremely busy president of the company under study. If the president likes your report, you will not only receive the last portion of your fee, but you will also be retained (at a considerable additional fee) to help with the implementations of the recommendations of your report!

The report should be hard-hitting and persuasive. Read your report. Is it sufficiently persuasive to convince a tight-wad president to spend the money to implement your recommendations and to retain you for implementation purposes?

Be concise! Do not bore the president with descriptive material that does not lead to some point in your analysis. However, descriptive material is fine as long as it has some implications for your analysis and recommendations. A long-winded introduction describing the company's industry and environment would bore the president to tears. It is not necessary to describe every element of the business unless this is essential in your analysis and recommendations.

Be quick to the punch! Like most big-wigs, the president has a very limited attention span. After about the second page of the report, he/she starts to lose interest. Just give the president what he/she needs to know. For example, what are the problems, the causes of the problems and what must be done to solve them?

2. *Specifics*

- **Descriptive Material:** Descriptive material is a repeat of the facts of the case. Who? What? When? As a general rule, this should account for less than 15 % of the total content of the report unless it contributes substantially to your analysis.
- **Analysis:** This accounts for a major portion of the report. Specifically it answers How? and Why? questions. Determining what specific issues should be addressed in the analysis is the most challenging aspect of case analysis. Carrying out the analysis is typically less challenging. Discussion questions for the case are merely general guidelines for the important issues in the case. Merely answering the questions will not lead to a satisfactory analysis.
- **Recommendations:** This section follows naturally from the case analysis. If it does not, something is wrong with the analysis!! In this section, give the president something he/she can use. Suggestions which are infeasible will naturally get you thrown out of the office by Du..H the company bouncer!! Be decisive. There should be *absolutely no* "should possibly consider" in this section of the report.

Finally, attach as many Exhibits as you feel are necessary to support your computations and recommendations. Make sure to reference every Exhibit attached in the main body of the report.
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