



## **Operations Management**

MSCI 3000 (3 credits)

Fall Semester 2016

Professor Name: SIMONE BIGOLIN

Professor Email: [simonebigolin@hotmail.com](mailto:simonebigolin@hotmail.com)

### **Course Description**

This course addresses the operations of organizations from a strategic and operational perspective. It introduces some of the most widely used models in management science.

It addresses topics such as operations strategy, process selection, supply chain management, operations planning and scheduling, quality management.

### **Course Objectives**

In today's competitive environment, many organizations have been restructuring in response to global competition and the realization that maintaining customer loyalty is dependent upon operational excellence. Operations Management (OM) is about doing just that: designing internal processes and continually improving them once they are in place.

OM deals with the management of the resources required to provide the services and goods produced by an organization. These resources include: people, materials, equipment, facilities and knowledge. The operations function is central to any enterprise. OM is primarily concerned with the efficient and effective use of the resources of organizations, in recognition of the strategic importance of operational excellence as a major source of competitive strength.

## Learning objectives

On successful completion of this course, you should be able to:

- Demonstrate an understanding of the strategic importance of operations management and its purpose in contemporary global business environments.
- Discuss how operations management relates to the other functions, such as marketing, financial analysis and human resource management.
- Explain the need for operations management systems: inputs, processes and outputs of a variety of businesses.
- Develop the knowledge and critical thinking skills necessary to use the concepts and strategies in order to recognize, formulate, analyze, design and manage operations and create value.
- Describe and implement the methods and tools needed to model and analyze operations issues.

## Course Materials & Resources

- **Textbook:** “Operations Management” by Jay Heizer and Barry Render, 8<sup>th</sup> or 9<sup>th</sup> Edition, Prentice Hall.
- **Course Packet:** Lecture slides. Its purpose is to guide students in the lecture and facilitate taking notes. Most slides in the packet merely highlight the topics. You have to take notes in class and read the book to obtain the details. Always come to the lecture with your course packet.

## Grading

Course grades will be approximately distributed according to the recommended guidelines of the Management Sciences Department at the University of Iowa, which is 30% A's, 40% B's, 20% C's and 10% D's. These are only guidelines.

Minimum Points Needed for Each Grade\* (1000 points maximum possible):

Excellent	A	931 – 1000
	A minus	901 – 930
Good	B plus	871 – 900
	B	831 – 870
	B minus	801 – 830
Satisfactory	C plus	771 – 800
	C	731 – 770
	C minus	701 – 730
Passing	D	601 - 700
Failing	F	Below 600

\*plus or minus grading will be used in the final course grade.

### Points Allocation:

1 <sup>st</sup> Exam	300 points
2 <sup>nd</sup> Exam	300 points
Class Participation questions**	60 points
3 Quizzes (in class)	180 points (60 points per Quiz)
Business simulation report	100 points
Business simulation final result instructor	60 points available and allocated with the rule provided in class by the instructor

\*\* in 10 days of class there will be a daily question valued 6 points

Note: the 2<sup>nd</sup> Quiz will be precisely completing a questionnaire after the company tour.

## Class Schedule

Day (indicative)	Lecture		Reading assignments ( <u>before attending the class</u> ) and reminders
	Topic	Chapter	
01 – 02 – 03	Syllabus presentation	-	Article: “Who manages manufacturing?” (in the course pack)  For chapter 2: read only the par. “Ten strategic OM decisions”
	Introduction to Operations Management		
	Operations and Productivity	01 02	
	Process Strategy	07	
04 – 05	Capacity Planning	Supplement 07	Activity in class: The Dice Game (regarding capacity management)
06	Forecasting	04	Global Company Profile: Disney World (in Chapter 4, pag.104-105)
07 - 08	Supply Chain Management	11	Article: “Supply chain management” (the article is in the course pack)
09 - 10	Inventory Management	12	Global Company Profile “Amazon.com” (in Chapter 12, pag. 482-483)
11	Littlefield Labs – business simulation Managing your own company with your team	-	1. Littlefield Labs: Overview 2. Managing Customer Responsiveness at Littlefield Labs <i>(both are in the course pack)</i> <b>VERY IMPORTANT:</b> <b>Register your Team Account Name and Password within the date communicated in class by the professor</b>
	Midterm Exam Review		
12	<b>Midterm Exam</b>		

Date	Lecture		Reading assignment (before attending the class)
	Topic	Chapter	
13	Managing Quality	06	Global Company Profile "Arnold Palmer Hospital" (in Chapter 6, pag. 192-193)
14 – 15 – 16	Process Improvement: 1. Just in time and Lean manufacturing 2. Lean basic tools 3. Six Sigma	-	Please see slides in the course pack and material provided in class Reference chapter in the book for additional reading: chapter 16
17	Technical assessment of a plant	-	Before the company tour (date will be announced by CIMBA) read the provided article: "Read a plant - Fast" by Eugene Goodson
18	Littlefield labs business simulation Final debrief and reports preparation guidelines	-	
19 – 20	Project Management Project management basic technique: CPM	03	
21	Design of goods and services	05	Read the book chapter from page 155 to page 166
21 – 22 <i>Optional added topics (depending on available time)</i>	Human resources Aggregate Planning  MRP and ERP  Short-term scheduling	10 13  14  15	Global Company Profile: "Anheuser – Busch" (in Chapter 13, pag. 526-527) Global Company Profile "Wheeled Coach" (in Chapter 14, pag. 560-561)
22	Final Exam Review		
<b>December</b>	<b>FINAL EXAM</b>		The exact date of the final exam will be announced in advance by CIMBA.

## **Attendance Policy**

Attendance at all classes and CIMBA sanctioned activities is MANDATORY. All unexcused absences will have the following consequences:

- a. 1st absence will result in a loss of a 1/3 of a letter grade in that class
- b. 2nd (cumulative) absence will result in a loss of an entire letter grade in that class
- c. 3rd (cumulative) absence will result in a dismissal from the program.

Absences due to illness require a note from the CIMBA Office Staff. If a student is sick and cannot attend class, he/she must inform the CIMBA Staff immediately. Failure to do so will result in an unexcused absence.

## **Grievance Policy**

Student concerns regarding this course should first be discussed with me, the faculty member teaching this course. If we can't resolve the complaint, you may contact the CIMBA Director, Brandelle Unkrich (319-335-1041, [brandelle-unkrich@uiowa.edu](mailto:brandelle-unkrich@uiowa.edu)). The Director will review the details of the complaint and involve the Associate Dean of the Undergraduate Programs, as needed.

## **Academic Misconduct**

The Tippie College of Business at the University of Iowa follows an honor code regarding academic misconduct. That code can be found at <http://tippie.uiowa.edu/honorcode.cfm> and includes cheating, plagiarism, unauthorized collaboration, obtaining an unfair advantage, forgery, facilitating academic dishonesty, and misrepresentation. Be sure you are familiar with this code. Students who exhibit academic dishonesty will receive a zero (0) for the assignment or examination involved and may receive an "F" for the class. All incidents of cheating will be reported to the CIMBA staff, as well as to the Senior Associate Dean of the Tippie College of Business. The decision of the professor may be appealed to a Judicial Board. The Honor Code for the Tippie College of Business will determine the appropriate appeal process.

## **Accommodating Students with Disabilities/Academic Accommodations**

A student seeking academic accommodations such as a modification of seating, testing, timing, etc. should first register with Student Disability Services, then contact Shannon Lizakowski ([shannon-lizakowski@uiowa.edu](mailto:shannon-lizakowski@uiowa.edu)) in the CIMBA Office to make further arrangements. See <http://sds.studentlife.uiowa.edu> for more information.

## **Sexual Harassment**

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. If you feel that you are being or have been harassed or you are not sure what constitutes sexual harassment, we encourage you to visit the University website, [www.sexualharassment.uiowa.edu/index.php](http://www.sexualharassment.uiowa.edu/index.php), and to seek assistance from the CIMBA Director, Brandelle Unkrich, at 319-335-1041 or [brandelle-unkrich@uiowa.edu](mailto:brandelle-unkrich@uiowa.edu)