MSCI 3000 (3 credits)
Operations Management
Spring 2015

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Office Hours (Cimba Faculty Office): by appointment.

<u>Course Description</u>: 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 Prerequisites: Students should be able to use Excel and Word.

Course Highlights and 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 souce 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.

# **Textbook and Course Packet**

- <u>Operations Management</u> by Jay Heizer and Barry Render, 8<sup>th</sup> or 9<sup>th</sup> Edition, Prentice Hall.
- <u>Course Packet</u>: 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.

# **Class Policies**

## • 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 Undergraduate Office Staff and/or the Istituto Filippin medical 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.

#### Saturday Classes

Due to the extensive amount of travel time incorporated into the CIMBA Undergraduate program, we will have to have a few Saturday classes to ensure that we have the appropriate amount of class sessions (per UI regulations). These Saturdays have NOT been confirmed yet, however they will be by the end of the first week of classes. Note that these Saturday classes will NOT be during any of the CIMBA scheduled travel breaks.

## Accomodating disabilities or special needs:

PLEASE NOTE: If you have a disability that may require some modification of seating, testing, or any other class requirement, please let me know as soon as possible so that appropriate arrangements can be made. Similarly if you have any emergency medical information about which I should know, or if you need special arrangements in the event the building must be evacuated, please let me know. Please see me after class hours or during my scheduled office hours or schedule an appointment.

#### • Academic Misconduct:

It is my sincere hope that no student in this class does work which is not his or her own or submits work which is not his or her own. However, it seems prudent to clarify in advance the policy on cheating. If I determine that the assignment was not written solely by the student whose name appears on the project, the student will receive a zero (0) for the project and may receive and "F" for the class. If a student is determined to have cheated on an exam, the student will receive a score of "0" for the exam.

All incidents of cheating will be reported to the Associate Dean of the Tippie College of Business and the student may be placed on disciplinary probation for the remainder of his or her undergraduate work at the University of Iowa.

In general, the decision of the Professor may be appealed to the College of Business' Judicial Board, Associate Dean for the Undergraduate Program in accordance with University Policy. The Honor Code for the Tippie College of Business will determine the appropriate appeal process. The Honor Code may be found at <a href="http://www.biz.uiowa.edu/upo/advising/honorcode.html">http://www.biz.uiowa.edu/upo/advising/honorcode.html</a>

#### • Sexual Harassment.

The Tippie College of Business and the University of Iowa are committed to providing students with an environment free from sexual harassment. 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, http://www.sexualharassment.uiowa.edu/index.php, and to seek assistance from department chairs, the Dean's Office, the University Ombuds Office, or the Office of Equal Opportunity and Diversity.

## • Course Evaluation:

You will be given an opportunity to evaluate the lecture and discussion class during the semester. This will help me determine topics that are giving students difficulty and continuously improve the course.

# • 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	
	В	831 - 870	
	B minus	801 - 830	
Satisfactory	C plus	771 – 800	
Satisfactory	C plus C	771 – 800 731 – 770	
Satisfactory	_ · •		
Satisfactory  Passing	C	731 - 770	

<sup>\*</sup>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 60 points available and allocated with the rule

provided in class by the instructor

Note: the  $2^{nd}$  Quiz will be precisely completing a questionnaire after the company tour.

<sup>\*\*</sup> in each one of the 20 days of class there will be a question valued 3 points

#### • Exams:

The exams are closed book and closed notes. Formula sheets and needed tables will be provided when necessary. Bring your calculator and pencils to the exam. The dates for the midterm and final exams will be announced in class and are indicated in the course outline. You are required to make the necessary arrangements to take the exams on the specified times and dates.

### • Rectifying Scores:

After you get your quiz or assignment or exam report back, you have a week to complain to your Professor about your score. Beyond this period, we will not entertain any complaints. Please submit your regrade request in writing attached to the assignment/quiz/exam. The Professor reserves the right to re-grade the entire document.

## • 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 Department Chair, Nick Street (319-335-0858, <a href="mick-street@uiowa.edu">nick-street@uiowa.edu</a>). If you cannot resolve the complaint by speaking with the Chair, you may contact the Associate Dean of the Tippie College Undergraduate Program, Lon Moeller, at 319-335-0924 or by email at <a href="mailto:lon-moeller@uiowa.edu">lon-moeller@uiowa.edu</a>

### Expectations

Please pay a professional courtesy to the instructor and your classmates by turning off all cell phones, pagers or personal computers during class. Multi-tasking has been scientifically proven to damage the learning process.

# • Course Policies

Everything that concerns this course, including dropping and adding to the class after the deadline and academic misconduct, will be controlled by the College offering the course: so course policies are governed by the Tippie College of Business.

# <u>Course Outline – Spring 2015</u>

For students who received the **Edition 9<sup>th</sup>** of the textbook.

	Lecture	Reading assignments	
Day (indicative)	Topic	Chapter	( <u>before attending the class</u> ) and reminders
01 - 02 - 03	Syllabus presentation  Introduction to Operations Management	-	
	Operations and Productivity	01 02	Article: "Who manages manufacturing?" (in the course pack)
	Process Strategy	07	For chapter 2: read only the par. "Ten strategic OM decisions"
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) Activity in class: The Beer Game (regarding SCM)
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  Midterm Exam Review	-	1. Littlefield Labs: Overview 2. Managing Customer Responsiveness at Littlefield Labs (both are in the course pack) VERY IMPORTANT: Register your Team Account Name and Password within the date communicated in class by the professor
12	Midterm Exam		

	Lecture		Reading assignment
Date	Topic	Chapter	(before attending the class)
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	Human resources	10	
Optional added topics	Aggregate Planning	13	Global Company Profile: "Anheuser – Busch" (in Chapter 13, pag. 526-527)
(depending on available time)	MRP and ERP	14	Global Company Profile "Wheeled Coach" (in Chapter 14, pag. 560-561)
	Short-term scheduling	15	
22	Final Exam Review		
December 2014	FINAL EXAM		The exact date of the final exam will be announced in advance by CIMBA.

NOTE:

in this course outline all indicated READING ASSIGNMENTS are related to the edition  $9^{\text{th}}$  of the textbook "Operations Management" (by Heizer and Render)

Please be aware that edition 8<sup>th</sup> and edition 9<sup>th</sup> of the textbook present minimum differences which are not going to affect your learning experience in this course.