

#### **OPERATIONS MANAGEMENT**

The Fuqua School of Business EGRMGMT 562 Fall 2021



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### **Course Description**

Operations management involves planning and controlling the processes used to produce the goods and services provided by an organization. In essence, it is the management of all activities related to doing the actual work of the organization. Managing these processes can be quite challenging—they are often very complex, and can involve large numbers of people and facilities, huge volumes of materials and great distances.

Managed well, an organization's operations can be a key source of competitive advantage. They can play a critical role in facilitating an organization's marketing strategy, and they can enable an organization to deliver its products or services with high quality at low cost. Managed poorly, operations can be a significant contributor to disappointing results. As a result, a fundamental understanding of operations management is important for all managers within an organization.

Specific objectives of the course are to:

- Introduce you to the functional area of operations and to increase your awareness of how a firm's operations interface with the other functional areas of the organization.
- Familiarize you with the various issues and problems that traditionally arise in the management of operations within both manufacturing and service organizations.
- Acquaint you with some of the terminology, modeling, and methodologies that often arise in the handling and resolution of these issues and problems.

## **Readings and Textbook**

There is one required reading for this course. This "novel" is easy reading compared to a textbook, and is available in many other language translations- feel free to get any one.

"The Goal" by Eliyahu Goldratt

The course pack contains all required reading materials and cases used for the course. Supplemental materials will be handed out in class.

### **Grading**

#### • Distribution:

Class Participation	Individual	• In-Class	10%
		Discussion Board	
Assignments (3)	Individual	On Sakai	30%
Final Exam	Individual	On Sakai	25%

Simulation	Team of 3-4	Littlefield Technologies	25%
Case Presentations	Team of 3-4	PPT, 1 or 2 cases	10%

Your grade will depend upon your individual grade components **subject to** your participation in the team components.

- **Team:** For team assignments, a team should consist of **4 students**. Please send me an e-mail with a list of your team members (one e-mail per team) by/after the first class. I may change team composition at my discretion.
- Quizzes: We will have quizzes for almost every class. There will be more quizzes in the first half of the semester. These will be short numerical or descriptive questions that have to be answered by you individually, and are designed to focus our minds on the topic for the class.
- Class Participation: Successful class participation requires regular attendance and regular and positive contributions to case and class discussions. For everyone to get the most out of each class session, it is necessary that all students read the assigned materials and come to class prepared to participate constructively in the discussion. Students are encouraged to share their relevant work experience as part of class discussion. Discussion questions will be provided for each of the class sessions. Students should use these questions as a starting point and rough guide for thinking about the material in the readings. The components are:
  - o In-Class discussion contribution (for campus students)
  - Write-ups on the discussion topics or current articles on the discussion board (for distance students)
- Case Presentations: Each team will have to present cases in class. We will ask for your team preferences, and will try to match your case assignments to your preferences, if possible. The

case presentations should address the case questions, and be planned for 20 minutes, plus 5 minutes for Q&A. Please have a cover slide with the names of all team members.

#### Attendance

It is crucial that you attend all the class sessions. If you cannot attend a particular class due to illness or other special commitments, please send email to me, preferably ahead of the class that you will be missing.

(Superseded by any COVID-related guidelines or issues.)

#### **Honor Code**

The Honor Code will be strictly self-enforced in this class. It is each student's responsibility to understand and abide by the Honor Code as it applies to each class activity.

In regard to the **individual assignments**, all work is to be done on an **individual** basis. You may not discuss or exchange information regarding questions or answers with others either inside or outside of this class. In exams, asking anyone other than the professor to interpret a question is a violation of the Honor Code.

For the **team write-ups**, all work is to be done by **individual teams**—team members may not discuss or exchange information regarding the case analysis with members of other teams. In regard to **preparation for class discussion** involving readings, exercises or cases which you are not required to write up, you may discuss the material with other members of the class. You may not reference notes from, or exchange information with, students from previous years. You also may not access solutions, analyses, etc. of cases that you are assigned to write up or that will be discussed in class.

Failure to adhere to any of these requirements constitutes a violation of the Honor Code. If there is any question as to whether an activity is or is not permissible (in this class) under the Honor Code, consult the professor prior to undertaking the activity.

#### **Classroom Norms**

We will set up the classroom norms for the class based on what enables every one of us to learn in a supportive manner.

Here are some examples of norms I have used in the past-subject to change if the class so wishes

- No laptop, cellphone or tablet use in class.
- Come prepared and ready to discuss/answer when called upon.

# 1: Introduction

Case:  "Komatsu Komtrax" (Shih, Hong, Park), HBSP Case 9-619-022 (2018)	Readings:  "Operations-Based Strategy", California Management Review, Summer 1998		
<ol> <li>Case Questions:         <ol> <li>Summarize the benefits of data collection from the Komtrax system, to customers, to Komatsu, and to any others.</li> <li>What new capabilities did Komatsu have to develop in order to leverage Komtrax?</li> <li>How did Komtrax impact the demand forecasting and production planning process at Komatsu?</li> </ol> </li> <li>How will you address the challenges mentioned at the end, i.e. low-cost rivals and price sensitive customers?</li> </ol>	<ol> <li>Topic Questions:</li> <li>Why is Operations important for strategy?</li> <li>Provide one example of a recent operations-based successful firm.</li> <li>What are some of the challenges for operations in today's business and economic environment?</li> </ol>		

# **Schedule Summary**

Class	Date	Topic	Case/Readings	Due
1	Aug 23	Introduction	"Komatsu Komtrax" (Shih, Hong, Park), HBSP Case 9-619-022 (2018)  "Operations-Based Strategy", California Management Review, Summer 1998	
2	Aug 30	Process Analysis I	"Types of Processes" Harvard Business School Teaching Note HBSP 682008- PDF-ENG (1981)  "Process Analysis" Fuqua School of Business teaching note	
3	Sep 06	Process Analysis II	"Executive Shirt Company, Inc." HBSP Case 696071-PDF-ENG (1995) "The Goal" 1/3	
4	Sep 13	Queuing	"Queueing Analysis" Fuqua School of Business teaching note  "Paediatric Orthopaedic Clinic at the Children's Hospital of Western Ontario" HBSP Case 908D01-PDF-ENG	Assignment 1 (PA)
5	Sep 20	Service Operations	"Breakfast at the Paramount" (Buell) HBSP Case 9-617-011 (2020)	
6	Sep 27 Remote Late Start	Logistics	"Uber: Leading the Sharing Economy", HBSP Case W16087-PDF-ENG	Assignment 2 (Queueing)
7	Oct 11	Inventory I	"Inventory Management" Fuqua School of Business teaching note	

8	Oct 18	Inventory II	"Seven-Eleven Japan" (Whang), HBSP Case GS-18 (2006) "The Goal" 2/3	
9	Oct 25	Lean Production	"Toyota Motor Manufacturing USA, Inc." HBSP Case 693019-PDF-ENG  "Decoding the DNA of the Toyota Production System" HBR Sept-Oct 1999	Assignment 3 (Inventory) (Littlefield Start)
10	Nov 01	Quality	"Constructing and Using Process Control Charts", HBSP Note 686118-PDF-ENG "Deutsche Allgemeinversicherung" (Upton), HBSP Case 9-696-084 (1997)	Paper Topic
11	Nov 08	Project Management	"Note on Project Management" HBSP Note W92C44-PDF-ENG  "How to Fail in Project Management (Without Really Trying)" HBSP BH010- PDF-ENG  "Cambridge Software Corporation" (Dhebar), HBSP Case 9-191-072 (2009)	(Littlefield End)
12	Nov 15		"The Goal" Discussion  Littlefield Debrief	Team Littlefield Report
13	Nov 22	Conclusion		Paper

I will be out of town on September 27<sup>th</sup>, so we will have that class remotely, and a later start. Subject to minor modifications.