

Course Syllabus of Operations Management

Spring 2020

Instructor: Wenqiang Xiao
Office: KMC 8-72
Office hour: Wednesday, 1 to 2pm
Email: wxiao@stern.nyu.edu

What is Operations Management

Operations is one of the primary functions of a firm. Whereas marketing focuses on the demand for the product, and whereas finance provides the capital for the product, operations produces and delivers the product. Operations management is about *designing, analyzing, and improving* the whole transformation process, including procurement, production, distribution, warehousing, and retailing, with the objective of creating competitive advantage for the enterprise.

Course Objective

This course provides a foundation for understanding the operations of a firm. Our objective by the end of the course is to provide you with the *analytical skills* and *managerial insights* necessary to critically analyze a firm's operations decisions and practices. Such knowledge is important for careers in a variety of areas, including general management, entrepreneurship, investment banking (e.g. business restructurings, mergers and acquisitions), venture capital (e.g. evaluating new business plans) and management consulting (business restructuring improvement).

Course Content

This course has the following four modules, each of which consists of several topics that are connected to some extent and share the common theme of the module.

1. Managing Process and Resource.
2. Managing Service Operations.
3. Managing Inventory.
4. Managing Supply Chain.

Case Link

Please use the following link to purchase the electronic version of the cases. First time users need to register an account. There are six cases in the package, at the price of \$4.25 per case.

<https://hbsp.harvard.edu/import/567276>

Grading Scheme

Class participation	10%
Homework & In-Class Exercises	10%
Exam I	40%
Exam II	40%

Homework and In-Class Exercises

Homework should be submitted in class before case discussion. A penalty of 30 percent deduction applies to any late submission.

Exams

Exam I: Mar 10

Exam II: May 7

The exams are closed notes/books, and non-accumulative.

Laptop Policy

Many students (and this professor) find the use of laptops during class to be distracting. Therefore, except when instructed by the professor, please refrain from using your laptop during class.

Attendance and Classroom Etiquette

Your attendance is expected for every class session. Please notify me in advance if you have to miss a class due to a legitimate reason. When you attend, you will be expected to conduct yourself professionally and respectfully during class, which means being attentive and considerate of others in the class. This means refraining from the use of cell phones, text messaging, email, reading the newspaper, etc. during class.

Course Schedule

Module	Session Title	Date	Laptop
Managing Process and Resource	Introduction	Jan 28	
	Process Strategy: Benihana Case	Jan 30	
	Process Strategy: Zara Case	Feb 4	
	Process Strategy: Dell's Push and Pull Process	Feb 6	
	Bottleneck Analysis: The Goal	Feb 11	
	Bottleneck Analysis: National Cranberry Case	Feb 13	
	Optimal Resource Allocation	Feb 18	Yes
	Optimal Design of Flexible Resource	Feb 20	
Managing Service Process	Coping with Variability of Service System	Feb 25	Yes
	Simulating Service System	Feb 27	Yes
	Separating vs. Pooling Servers	Mar 3	Yes
	Review	Mar 5	
	Exam I	Mar 10	
Managing Inventory	Newsvendor Model	Mar 12	
	L.L. Bean Case	Mar 24	
	Order-up-to Policy: Managing Champagne Inventory in a Liquor Store Case	Mar 26	Yes
	Tailored Base-Surge Policy: China-Mexico Dual Sourcing Case	Mar 31 April 2	Yes
	Risk Pooling: HP Case	April 7	Yes
Managing Supply Chain	Apple Case	April 9	
	Cargo Case	April 14 April 16	Yes
	Sales & Operations Planning	April 21 April 23	Yes
	Beer Game and Its Debrief	April 28 April 30	
	Review	May 5	
	Exam II	May 7	

Homework #1 (Due Jan 30)

Read the case “Benihana of Tokyo” and answer the following questions.

1. What are the differences between the Benihana process and that of a typical restaurant?
2. What are the major design choices of Benihana which generate operating efficiencies?

Homework #2 (Due Feb 4)

Read the case “ZARA: FAST FASHION” and answer the following questions.

1. What do the financial comparisons in Exhibit 6 indicate about Inditex’s relative operating economics? Its relative capital efficiency?
2. Why does Zara focus on quick response, i.e., the speed to the market?
3. How specifically do the distinctive features of Zara’s business process allows it to achieve quick response?

Homework #3 (Due Feb 6)

Read the case “DELL: OVERCOMING ROADBLOCKS TO GROWTH” and answer the following questions.

1. Describe Dell’s direct sales model. What benefits does the direct sales model provide?
2. Why has the direct sales model worked well and what are its limitations?
3. With the growing maturity of the PC market, what changes do you suggest for Dell’s direct sales model?

Homework #4 (Due Feb 13)

Read the case “NATIONAL CRANBERRY COOPERATIVE 1996” and answer the following questions.

1. What is the main problem? What are the causes of the problem?
2. What recommendations would you make to Mr. Schaeffer?

Homework #5 (Due Mar 24)

Read the case “L.L. Bean, Inc.: Item Forecasting and Inventory Management” and answer the following questions.

1. How does L.L. Bean use past demand data and a specific item forecast to decide how many units of that item to stock?
2. What should L.L. Bean do to improve its forecasting process?

Homework #6 (Due April 7)

Read the case “HEWLETT-PACKARD CO.: DESKJET PRINTER SUPPLY CHAIN (A)” and answer the following questions.

1. What is the main problem? What are the causes of the problems?
2. What is your proposal to solve the problem?

Homework #7 (Due April 9)

Read the case “Apple Inc.: Managing a Global Supply Chain” and write a two-page summary of the case.

Homework #8 (Due April 14)

Read the Cargo case and write a one-page summary of the case.