

The University of Pennsylvania
The Wharton School
Operations, Information and Decisions Department

Fall 2020C

OIDD 615: Managing the Productive Core of the Firm: Operations Strategy

Professor

G rard P. Cachon

Office: <not applicable>

Office hour: 4:30 – 6:00pm Thursday, or by appointment
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Teaching Assistants

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Course Canvas: <https://canvas.upenn.edu/courses/1532995>

Study.net: ????

Final Exam: DATE TBD

What you should know before taking this course

- This course is delivered entirely online via a blend of asynchronous videos you watch on your own and synchronous online sessions. There are no in-person sessions.
- The content of this course has not changed from the past, only the delivery mode has changed.
- There is a final exam, it is given at the school determined time, it is open book, and it is taken via Canvas.

I. Description

Operations strategy is about organizing people and resources to gain a competitive advantage in the delivery of products (both goods and services) to customers. This course approaches this challenge primarily from two perspectives: (1) how should a firm design their products so that they can be profitably offered; (2) how can a firm best organize and acquire resources to deliver its portfolio of products to customers. To be able to make intelligent decisions regarding these high-level choices, this course provides a foundation of analytical methods. These methods give students a conceptual framework for understanding the linkage between how a firm manages its supply and how well that supply matches the firm's resulting demand.

This course is a blend of qualitative and quantitative material. Both are assessed on assignments and the final exam.

This course content is delivered with a mixture of lectures and case discussions. Lectures emphasize analytical tools. Case discussions emphasize making decisions in unstructured situations, generally with limited data. Both are important for a complete learning experience.

II. Expectations and policies

For transparency and clarity, listed here is a set of course expectations and policies to facilitate our collective learning and encourage an enjoyable learning experience for everyone:

- *Be on time.* Please be ready to participate at the start of each class session.
- *Be prepared.* Each session requires you to prepare some material in advance. To guide you with this preparation and to enhance the in-person session discussions, you can complete a session preparation quiz (which is included in your grade, as described in the grading section).
- *Video on.* During synchronous sessions, you are encouraged to leave your video on unless doing so is not feasible or would distract from your learning.
- *Sign up for "open-to-call".* Everyone should be prepared during synchronous sessions to discuss and contribute to the material. Before each session you may add your name to an "open-to-call" list (via a Canvas assignment). Students on the open-to-call list are given priority to be called on, especially when unprompted.
- *Feedback.* After each session you are encouraged to submit anonymous constructive feedback or questions to the professor regarding the session, e.g., course content, policies, additional information, concerns, etc. In sum, consider this an open channel of communication. Effort will be made to respond to the feedback when appropriate, e.g., in the next class session, or with a course announcement.
- *Recording.* Each synchronous class session will be recorded.
- *Contact hours.* The course has been designed for 80 minutes of contact per session. If 30 minutes of that contact time in the old-normal/traditional/in-person version was lecture based and now replaced with an asynchronous video, then the synchronous session will only be 50 minutes to maintain the constant total of 80 minutes per session.
- *Variable start and end times.* Because contact hours are divided between synchronous and asynchronous components, check with each session for its start and end time.

- *Course organization.* The course canvas has been organized such that there is one module for each class session and one for assignments. All of the tasks you need to do for a session are contained within the session's module.
- *Respect privacy.* Descriptions, images, or videos of individuals in the course are not to be shared with others.

III. Grading

Each student's final score is based on the following components:

Three equally weighted homework assignments (30%)

- Assignments are due by 11:59pm ET on the due date. A late assignment generally incurs a substantial penalty or may not be accepted (i.e., a 100% penalty).
- Assignments are submitted electronically through Canvas.
- Each student must complete his or her own assignment. However, to promote learning, students are allowed to discuss questions with other students registered for OIDD615 this term. Use collaboration judiciously, and only for learning purposes.
- No partial credit is given on quantitative questions.

Class participation (30%)

- You receive 5 points for completing the syllabus quiz (via Canvas).
- You receive 1 point for each session for completing the session preparation quiz (via Canvas)
- You receive 1 point for completing in-session polls (polleverywhere) or other forms of feedback (filling out a google doc).
- You receive points for contributions to synchronous session discussion. Up to 1 point is awarded for a post or reply to a post on the discussion board. Up to 2 points are awarded for in-class comments that promote collective learning. Only meaningful contributions to collective learning are awarded points (e.g., thoughtful, on-point, not repetitive of previous remarks, etc.) Your score for each session is the maximum of the two components (discussion board, in-class).

Final exam (40%)

- All students (without academic accommodations) must take the final exam at the above assigned time.

Your final (letter) grade depends on your final score on a 100 point scale: A+ = [95,100], A = [88,95), A- = [84,88), B+ = [80-84), B = [70,80), B- = [65,70), C+ = [55,65), C = [50,55), C- = [45,50), D = [33,45), F = [0,33) or lower than 33% on the final exam.

V. Course Materials

Cases:

- Cases are available via Study.net.
- You must have access to the course cases.

Text

- Selected chapters from Cachon, G. P. & Terwiesch, C. Matching supply with demand: An introduction to operations management. 4th edition, McGraw Hill, Boston MA. There are two purchase options:
 - **Print book Option (\$53):** The UPENN bookstore is offering a print version of the required chapters listed as: OIDD 615: Operations Strategy by Cachon ISBN # 9781307315196 for \$53.
 - **E-Book Option (\$49):** available at www.mcgrawhillcreate.com/shop (enter “OIDD 615” in the Looking for New Materials?)
- You are responsible for the material in the text (i.e., this material can be on assignments, included in the final and part of classroom discussion).
- Older editions of the text are available but the content is not exactly the same. In addition, chapter numbers are different than in the 4th edition.

VI. Summary of Code of Conduct

	Materials							People				
OIDD 615: Operations Strategy	Approved calculator	Laptop / other electronics	Summary sheet	Book / class notes/ Canvas materials	Past notes / summaries	Past exams / assignments	Internet content / other outside materials	Learning team / approved work team	Other student(s) in same section	Student(s) in other sections (same term)	Wharton student not taking the class this term	Person outside of Wharton
Readings & Cases	A	A	A	A	A	A	A	W	W	W		
Assignments	A	A	A	A	A	A	A	W	W	W		
Final Exam Prep	A	A	A	A	A	A	A	W	W	W		
Final Exam	A	A	A	A	A	A	A					
	A = Allowed material Shaded Cell = Not allowed							W = Allowed to work together D = Discussion of general concepts and procedures is allowed but no sharing of specific answers. Shaded Cell = Not allowed				

OIDD 615 – Class Sessions and Schedule

Session #	Topic and Readings	Date
1	Introduction and Business Model Innovation Case: Zipcar	1-Sep
2	Flexible resources Case: Calzo Ltd – Focus on People	3-Sep
3	Betting on uncertain demand - Newsvendor model Text: Chapter 14 (Betting on Uncertain Demand)	8-Sep
4	Flexible supply chains Case: Sport Obermeyer Text Chapter 15 (Assemble-to-Order, Make-to-Order ...)	10-Sep
	Assignment #1 due by 11:59 p.m.	11-Sep
5	Mass customization and make-to-order Case: Timbuk2	15-Sep
6	Lead times and the order up-to model Text: Chapter 16 (Service levels and lead times)	17-Sep
7	Delayed differentiation Case: HP	22-Sep
8	Managing risk in operations Text: Chapter 17 (Risk-pooling strategies to reduce ...)	24-Sep
	Assignment #2 due by 11:59 p.m.	25-Sep
9	Internet distribution Case: Amazon	29-Sep
10	Fast fashion Case: Zara	1-Oct
11	Revenue management Case: Uber Text: Chapter 18 (Revenue management with capacity ...)	6-Oct
12	Review	8-Oct
	Assignment #3 due by 11:59 p.m.	9-Oct
	FINAL EXAM - TBD	TBD