Department of Technology Management and Innovation
MG 6303 Operations Management (INET)
Spring 2018

Professor: Tom Helling

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Course Pre-requisites: Graduate standing

Course Objectives and Description:
This course focuses on developing a deeper understanding of the role that operations management plays in determining business strategy and in developing competitive advantage. The primary emphasis is on how to develop and effectively manage operations in knowledge-intensive enterprises. Participants discuss the operational design and managerial implications when the emphasis of the operations group is more on knowledge management than on production and facilities management; managing the effective integration of technology, people and operating systems; understanding the complexities and challenges of operations management; the challenges of developing and managing supply chain networks; and the critical role of technology in developing operational capabilities in an organization.

Course Structure:
This course is conducted entirely online, which means you do not have to be on campus to complete any portion of it. You will participate in the course using NYU Classes located at https://newclasses.nyu.edu/.

The course is structured to provide ample opportunity for interaction among students, and between student and instructor. We will be discussing a number of research papers, case studies and relevant reading material during this course. It is expected that you actively participate in keeping up with the lectures and readings, and also in the scheduled interactive sessions. Class interaction is vital to understanding many of the central themes and issues in operations management. Students are expected to actively participate in weekly discussions, therefore students must have completed assigned readings and be prepared to present when called upon.

The primary teaching method will include recorded lectures and a weekly webinar in which we will discuss the important concepts covered in textbook chapter readings. A case is a comprehensive examination of real managerial situations and challenges that are analyzed.
Required Text, Case Studies, and Technology:

Required textbook:

Case Studies (HBS):
Course pack access: http://cb hbsp.harvard.edu/cbmp/access/72594488

Required for WebEx:
You are required to use a headset with a noise-cancelling microphone.

Course Requirements:

Grading Breakdown:
WebEx and Forums Participation and Assignments: 25%
Exam One: 25% of Final Grade
Exam Two: 25% of Final Grade
Group Project Report: 25% of Final Grade

- Lectures will become available at midnight on Sunday evening each week and will be delivered through Active Learning Modules* in NYU Classes.
- Weekly assignments will be used to supplement the course content.
- In addition to lectures, participation will play a key role in this course. Students are expected to participate in weekly discussion forums and webinar sessions.

*Consult with NYU Tandon Online for further details about Active Learning Modules.

Participation and Assignments:
Participation is vital in this course. You will have two means of participation – completing weekly assignments (primarily HBS cases) in Forums, and the weekly WebEx, in which we will discuss key concepts in terms of course content for the week, and the text and HBS cases.
1. Class preparation involves assigned reading and case study preparation in advance of the class.
2. Participation includes the quality, timeliness and rationale of your verbal and written contribution to the class discussion during webinars and in class forums.
3. Students will have work assigned each week. These will generally be focused on the assigned case study for that week, but may include other assignments as well. These will be graded as a collective, not each individually, and should also serve to inform students regarding key concepts. There will be defined submission dates for all assignments. If you fail to submit by the deadline, the opportunity to do so will no longer be available to you.

Exams One and Two:
Exam One will cover all the materials assigned and discussed in class prior to exam date. Exam Two will cover all material from Exam One through the balance of the course.

The tests will include several different types of questions, including potentially short answer, multiple choice, fill-in the blank, and short essay.
Exams will be scheduled through and proctored by a third party vendor - ProctorU.

Please note the following regarding the ProctorU process:
1. The exam will be remotely proctored for the entire duration of the exam. Please ensure you register and schedule it. An exam which is not proctored will be given 0.
2. The webcam of your laptop MUST BE FUNCTIONAL AND SWITCHED ON THROUGHOUT THE EXAM.
3. Please make sure that you are seated alone in a silent room. You are allowed to keep ONLY the following material on your desk: laptop, charger, earphones, mouse, NYU ID, bottle of water. No other material is allowed. This will be monitored by the proctor at all times.
4. Please ensure that you do not leave the room while still writing the exam.
5. A timer will be provided on screen. If you do not submit your exam by the end of the allotted time, it will get submitted automatically.
6. PLEASE MAKE SURE TO KEEP SAVING YOUR WORK AS YOU GO THROUGH THE QUIZ. No extra time will be given in case your work is lost if you have not saved it.
7. Please keep your answers to the point.
8. If you face any problem (not content related) while writing the quiz, please inform the proctor immediately.
9. Please note that this quiz is a closed book exam; i.e. you are not permitted to access either the textbook, slides, internet or any other content-related resources during the quiz.

Group Project Report:
Each student will be assigned to a group team by the professor. The purpose of this project is to have students explore the operations function of an existing service organization of their choosing. On completion of the project students should:
• Understand how a service is generated and delivered to the customer using one service delivery system in a firm of your choice; and
• Have explored in depth the operations management activities in that organization.

The project involves the development of a comprehensive report (15-page minimum). This project is meant to help you apply what you have learned in the course. This project is focused on a single service organization, and must include an analysis of a minimum four or more operations management activities covered in the course.

Much more information is available in NYU Classes. Access the document found in Assignments, under Group Project Report.

Deliverable Due Dates:
1. Each group is expected to submit three (3) companies, in priority order of interest by midnight on Friday, February 9th, 2018, and one will be chosen by the professor(s) for the group.
2. The project proposal is due by midnight on Friday, March 9th, 2018.
3. The complete report must be submitted as an MS-Word document on NYU Classes, by midnight on Friday, April 27th, 2018.
4. Peer assessments (via an online survey) will be used to evaluate individual participation on teams and will be due by noon on Monday, April 30th.
Academic Integrity:
All students are responsible for understanding and complying with the NYU Statement on Academic Integrity.

Academic Integrity for Students at NYU

This policy sets forth core principles and standards with respect to academic integrity for students at New York University. Each school at New York University may establish its own detailed supplemental guidelines for academic integrity, consistent with its own culture, and consistent with the University-wide general guidelines described in this document.

At NYU, a commitment to excellence, fairness, honesty, and respect within and outside the classroom is essential to maintaining the integrity of our community. By accepting membership in this community, students take responsibility for demonstrating these values in their own conduct and for recognizing and supporting these values in others. In turn, these values will create a campus climate that encourages the free exchange of ideas, promotes scholarly excellence through active and creative thought, and allows community members to achieve and be recognized for achieving their highest potential.

In pursuing these goals, NYU expects and requires its students to adhere to the highest standards of scholarship, research and academic conduct. Essential to the process of teaching and learning is the periodic assessment of students' academic progress through measures such as papers, examinations, presentations, and other projects. Academic dishonesty compromises the validity of these assessments as well as the relationship of trust within the community. Students who engage in such behavior will be subject to review and the possible imposition of penalties in accordance with the standards, practices, and procedures of NYU and its colleges and schools. Violations may result in failure on a particular assignment, failure in a course, suspension or expulsion from the University, or other penalties.

Faculty are expected to guide students in understanding other people's ideas, in developing and clarifying their own thinking, and in using and conscientiously acknowledging resources - an increasingly complex endeavor given the current environment of widely available and continually emerging electronic resources. In addition, students come to NYU from diverse educational contexts and may have understandings regarding academic expectations that differ from those at NYU. NYU values and respects all academic traditions; however, while at NYU, students are expected to adhere to the norms and standards of academic integrity espoused by the NYU community and will be assessed in accordance with these standards. Students should ask their professors for guidance regarding these standards as well as style guide preferences for citation of sources for assignments in their courses.

Following are examples of behaviors that compromise the academic and intellectual community of NYU. The list is not exhaustive. Students should consult the websites and guidelines of their individual schools for an extended list of examples and for further clarification.
1. Plagiarism: presenting others' work without adequate acknowledgement of its source, as though it were one's own. Plagiarism is a form of fraud. We all stand on the shoulders of others,
and we must give credit to the creators of the works that we incorporate into products that we call our own. Some examples of plagiarism:

- a sequence of words incorporated without quotation marks
- an unacknowledged passage paraphrased from another's work
- the use of ideas, sound recordings, computer data or images created by others as though it were one’s own

2. Cheating: deceiving a faculty member or other individual who assess student performance into believing that one’s mastery of a subject or discipline is greater than it is by a range of dishonest methods, including but not limited to:

- bringing or accessing unauthorized materials during an examination (e.g., notes, books, or other information accessed via cell phones, computers, other technology or any other means)
- providing assistance to acts of academic misconduct/dishonesty (e.g., sharing copies of exams via cell phones, computers, other technology or any other means, allowing others to copy answers on an exam)
- submitting the same or substantially similar work in multiple courses, either in the same semester or in a different semester, without the express approval of all instructors
- submitting work (papers, homework assignments, computer programs, experimental results, artwork, etc.) that was created by another, substantially or in whole, as one's own
- submitting answers on an exam that were obtained from the work of another person or providing answers or assistance to others during an exam when not explicitly permitted by the instructor
- submitting evaluations of group members’ work for an assigned group project which misrepresent the work that was performed by another group member
- altering or forging academic documents, including but not limited to admissions materials, academic records, grade reports, add/drop forms, course registration forms, etc.

3. Any behavior that violates the academic policies set forth by the student’s NYU School, department, or division.

**Moses Center Statement of Disability**

If you are a student with a disability who is requesting accommodations, please contact New York University’s Moses Center for Students with Disabilities at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at [www.nyu.edu/csd](http://www.nyu.edu/csd). The Moses Center is located at 726 Broadway on the 2nd floor.
Week One: Operations and Productivity
January 22 - 28
Students will be able to define what operations management is, explain the distinction between goods and services, identify the differences between production and productivity, compute single and multi-factor productivity, and identify critical variables in enhancing productivity.

Required Readings:
1. Text: Chapter One
2. National Air Express (Text Case)
3. Frito-Lay: Operations Management in Manufacturing (Text/Video Case)
4. Hard Rock Café: Operations Management in Services (Text/Video Case)

Assignment One (complete assignment in Forums on NYU Classes by midnight on Jan. 28th)
Prepare to discuss the following case study – *The Container Store*

WebEx Meeting One (Friday, January 26th @ 6:00 – 7:30 pm EST)

Week Two: Operations Strategy in a Global Environment
January 29 – February 4
Students will be able to define mission and strategy, identify and explain three strategic approaches to competitive advantage, define the ten decisions of operations management, identify the five OM strategy insights provided by PIMS research, and identify and explain four global operations strategy options.

Required Readings:
1. Text: Chapters One and Two (assuming you have not already completed the first chapter)
2. Minit-Lube (Text Case)
3. Strategy at Regal Marine (Text/Video Case)
4. Hard Rock Café’s Global Strategy (Text/Video Case)
5. Outsourcing Offshore at Darden (Text/Video Case)

Assignment Two (complete assignment in Forums on NYU Classes by midnight on Feb. 4th)
Prepare to discuss the following case study – *Cambridge Cooling Systems: Global Operations Strategy*

WebEx Meeting Two (Friday, February 2nd @ 6:00 – 7:30 pm EST)

Week Three: Design of Goods and Services
February 5 - 11
Students will be able to define the product lifecycle, define product development system, build a house of quality, describe how time-based competition is implemented, describe how products and services are defined, prepare the documents needed for production, describe customer participation in the design and production of services, and apply decision trees to product issues.

Required Readings:
1. Text: Chapter Five
2. De Mar’s Product Strategy (Text Case)
3. Product Design at Regal Marine (Text/Video Case)

Assignment 3 (complete assignment in Forums on NYU Classes by midnight on Feb. 11th)
Prepare to discuss the following case study – Monticello Motor Club: Straights and Corners

WebEx Meeting Three (Friday, February 9th @ 6:00 – 7:30 pm EST)

Week Four: Managing Quality
February 12 - 18
Students will be able to define quality and TQM, ISO international quality standards, explain six sigma, explain how benchmarking is used, explain quality robust products and Taguchi concepts, and use the seven tools of TQM.

Required Readings:
1. Text: Chapter Six
2. Southwestern University (C) (Text Case)
3. The Culture of Quality at Arnold Palmer Hospital (Text/Video Case)
4. Quality at the Ritz-Carlton Hotel Company (Text/Video Case)

Assignment 4 (complete assignment in Forums on NYU Classes by midnight on Feb. 18th)
Prepare to discuss the following case study – Oberoi Hotels: Train Whistle in the Tiger Reserve

WebEx Meeting Four (Friday, February 16th @ 6:00 – 7:30 pm EST)

Week Five: Process Strategy
February 19 - 25
Students will be able to describe production processes, compute crossover points for different processes, use the tools of process analysis, describe customer interaction in process design, and identify recent advances in production technology.

Required Readings:
1. Text: Chapter Seven
2. Rochester Manufacturing’s Process Decision (Text Case)
3. Process Analysis at Arnold Palmer Hospital (Text/Video Case)
4. Process Strategy at Wheeled Coach (Text/Video Case)

Assignment 5 (complete assignment in Forums on NYU Classes by midnight on Feb. 25th)
Prepare to discuss the following case study - CEMEX: Information Technology, an Enabler for Building the Future

WebEx Meeting Five (Friday, February 23rd @ 6:00 – 7:30 pm EST)

Week Six: Location Strategies
February 26 – March 4
Students will be able to identify and explain seven major factors that affect location decisions, compute labor productivity, apply factor rating method, complete location cost-volume analysis
graphically and mathematically, use of center of gravity method, and understand the differences between service and industrial-sector location analysis.

Required Readings:
1. Text: Chapter Eight
2. Southern Recreational Vehicle Company (Text Case)
3. Location of The Next Red Lobster Restaurant (Text/Video Case)
4. Where to Place Hard Rock Café (Text and Video Case)

Assignment 6 (complete assignment in Forums on NYU Classes by midnight on March 4th)
Prepare to discuss the following case study - Apoorva: A Facility Location Dilemma

WebEx Meeting Six (Friday, March 2nd @ 6:00 – 7:30 pm EST)

Week Seven: MIDTERM EXAM
March 5 - 11

Spring Break: March 12 – 18

Week Eight: Layout Strategies
March 19 - 25
Students will discuss important issues in office layout, define the objective of retail layout, discuss modern warehouse management and terms such as ASRS cross docking and random stocking, identify when fixed positions layouts are appropriate, explain how to achieve a good process oriented facility layout, define work cell and the requirements of a work cell, define product-oriented layout, and explain how to balance production flow in a repetitive or product oriented facility.

Required Readings:
1. Text: Chapter Nine
2. State Automobile License Renewals (Text Case)
3. Laying Out Arnold Palmer Hospital’s New Facility (Text/Video Case)
4. Facility Layout at Wheeled Coach (Text/Video Case)

Assignment 7 (complete assignment in Forums on NYU Classes by midnight on March 25th)
Prepare to discuss the following case study – ABC Shipyard: The Facility Layout

WebEx Meeting Seven (Friday, March 23rd @ 6:00 – 7:30 pm EST)

Week Nine: Human Resources and Job design
March 26 – April 1
Students will be able to describe planning policies, identify major issues in job design, identify major ergonomic and work environmental issues, use the tools of methods analysis, and understand the contribution of the visual workplace.

Required Readings:
1. Text: Chapter Ten
2. Jackson Manufacturing Company (Text Case)
3. Karstadt versus JCPenney (Pdf available on the Session page in NYU Classes)
4. Hard Rock’s Human Resources Strategy (Text/Video Case)

Assignment 8 (complete assignment in Forums on NYU Classes by midnight on April 1st)
Prepare to discuss the following case study – Staffing at the Strategic Advising Consulting Group: The “S” Word

WebEx Meeting Eight (Friday, March 30th @ 6:00 – 7:30 pm EST)

Week Ten: Supply Chain Management
April 2 - 8
Students will be able to explain the strategic importance of the supply chain, identify six supply chain sourcing strategies, explain issues and opportunities in the supply chain, the steps in supplier selection, describe approaches to supply chain negotiations, evaluate supply chain performance, compete the percent of assets committed to inventory, compute inventory turnover. Students will better appreciate supply chain risk and understand sustainable supply chain management.

Required Readings:
1. Text: Chapter Eleven
2. Dell’s Value Chain (Pdf available on the Session page in NYU Classes)
3. Darden’s Global Supply Chains (Text/Video Case)
4. Arnold Palmer Hospital’s Supply Chain (Text/Video Case)
5. Supply Chain Management at Regal Marine (Text/Video Case)

Assignment 9 (complete assignment in Forums on NYU Classes by midnight on April 8th)
Prepare to discuss the following case study – General Motors: Supplier Selection for Innovation

WebEx Meeting Nine (Friday, April 6th @ 6:00 – 7:30 pm EST)

Week Eleven: Sustainability and Supply Chain Management
April 9 - 15
Students will be able to describe sustainability, explain what corporate social responsibility entails and how CSR connects with sustainability, identify and explain the three R’s for sustainability, and explain the impact of sustainable regulations on operations.

Required Readings:
1. Text: Chapter Five (Supplement: Sustainability in the Supply Chain)
2. Text: Chapter Eleven (Supplement: Supply Chain Management Analytics)
3. Building Sustainability at the Orlando Magic's Amway Center (Text/Video Case)
4. Green Manufacturing and Sustainability at Frito Lay (Text/Video Case)

Assignment 10 (complete assignment in Forums on NYU Classes by midnight on April 15th)
Prepare to discuss the following case study - Ferrero Group: Achieving Sustainability through Supply Chain Integration
WebEx Meeting Ten (Friday, April 13th @ 6:00 – 7:30 pm EST)

Week Twelve: Inventory Management
April 16 - 22
Students will understand the importance of inventory management, various inventory models, and control of service inventories.

Required Readings:
1. Text: Chapter Twelve
2. Zhou Bicycle Company (Text Case)
3. Managing Inventory at Frito-Lay (Text/Video Case)
4. Inventory Control at Wheeled Coach (Text/Video Case)

Assignment 11 (complete assignment in Forums on NYU Classes by midnight on April 22nd)
Prepare to discuss the following case study - L’Oréal’s ACD Supply Chain Puzzle: Diagnosing the Root Causes of Underperformance

WebEx Meeting Eleven (Friday, April 20th @ 6:00 – 7:30 pm EST)

Week Thirteen: JIT, TPS, and Lean Operations
April 23 - 29
Students will understand and be able to describe Just-In-Time (JIT), the Toyota Production System (TPS), and Lean Operations principles as approaches to continuous improvement, and the importance of Lean concepts to knowledge-based sectors.

Required Readings:
1. Text: Chapter 16
2. JIT after a Catastrophe (Pdf available on the Session page in NYU Classes)
3. Mutual Insurance Company of Iowa (Text Case)
4. JIT at Arnold Palmer Hospital (Text/Video Case)

Assignment 12 (complete assignment in Forums on NYU Classes by midnight on April 29th)
Prepare to discuss the following analysis – Lean as a Universal Model of Excellence: It Is Not Just a Manufacturing Tool

WebEx Meeting Twelve (Friday, April 27th @ 6:00 – 7:30 pm EST)

Week Fourteen: FINAL EXAM
April 30 – May 6