



Process Improvement and Growth Master Class - Spring 2023

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Full Term, Thursdays 6:00 – 9:15pm.

January 26 – April 20, 2023

COURSE OVERVIEW

This class brings business operations and management science classes to the field with real-world experience. Through experiential learning, we will bridge the gap between theory and practice with international case discussions, conversations with guest speakers and hands-on company sponsored projects. Different to most classes in the school, in this class students will be exposed to a series of international cases and examples based on medium-sized, fast-growing entrepreneurial ventures. Each session will also include a guest speaker, often times the protagonist of the case studied, giving the students the opportunity to learn directly from successful entrepreneurs and senior executives. Additionally, students will put into practice the concept of process improvement by working on a company-sponsored applied project. Teams of 4-5 people, 2-3 MBA and EMBA students and 2-3 graduate engineering (SEAS) students, will work hand in hand with the instructors and company representatives to achieve company goals. For example, teams may be tasked with re-designing the logistical strategy of distribution of the company to get rid of inefficiencies, or identify and find strategies to eliminate areas of waste within the companies' processes, or analyze customer feedback and design operational solutions to increase customer satisfaction, etc.

Most of the sponsoring companies in this class have been selected from the Brooklyn Navy Yard industrial park so this course also offers the opportunity for students to help small/medium, fast-growing, innovative businesses based in New York. Companies provide the data and context; faculty provides guidance on best practices and teams will provide the analysis and solutions.

This course is targeted toward students wanting to have experiential learning experiences and for those planning careers in entrepreneurship, management consulting, operations and private equity or venture capital. It is a unique opportunity for students to put into practice the combination of skills acquired in different classes in a real-world situation while helping companies in the area. It is also a unique opportunity for MBA and EMBA students and Engineering students to collaborate in applied projects, interacting with company executives.

Throughout this course, students will execute on process improvement projects to:

- Use concepts and ideas from operations classes to solve interesting and important business problems
- Learn how to formulate relevant business questions that allow businesses to prioritize and grow
- Understand the various steps of the process improvement methodology like problem definition, mapping, data gathering, hypothesis generation, solution design
- Break down a complex business problem into multiple smaller, solvable problems
- Learn how to iterate on a solution to continually improve it
- Learn how to measure improvement using Key Performance Indicators (KPIs)
- Learn to develop a continuous improvement culture using the Deming Principles
- Learn how to collaborate meaningfully with multiple stakeholders
- Communicate results

There will be ongoing mentoring and guidance of the project teams by the professors throughout the semester and teams will debrief to each other at several states of their projects. Project teams will also have ongoing interactions with the project sponsors and will give a formal in person briefing to the firm. Appropriate project confidentiality will be respected.

COURSE ORGANIZATION

All sessions will be held at the Columbia campus and will be followed by meetings with company representatives for project work. The classes will be a mixture of case discussion, lectures and appearances by guest speakers.

CONNECTION TO THE MBA/EMBA CORE

The learning in this course will utilize, build on, and extend concepts covered in Business Analytics, Operations Management and the Statistics core courses.

METHOD OF EVALUATION

Grading will be based on attendance, participation, case reflections and an operational project.

Attendance	10%
Participation	30%
Case reflections	10%
Project	40%
Project Feedback	10%

All the components of the grade are individual assignments of type C with respect to the honor code

ATTENDANCE POLICY

Students are required to attend all class sessions and all meetings with the sponsoring companies for the projects. Attendance will be taken during both components of the class. Students should reach out to the instructors regarding excused absences (for religious observances; personal, medical, and family emergencies; military service; court appearances such as jury duty). Unexcused absences will affect your

course grade as follows:

- Students that miss 1 session (unexcused absence) will at most receive at most a HP for the course grade.
- Students that miss 2 sessions (unexcused absences) will receive at most a P for the course grade.
- Students that miss 3 sessions (unexcused absences) will receive an F for the course grade.

In addition to the effect on your final course grade, absences may also affect your participation grades.

CLASS PARTICIPATION

An important course requirement is active involvement in class discussion and engagement with our guest speakers and sponsoring companies. Your participation is essential for both your own learning and that of other students. Much of the learning will take place in class discussion.

Unexcused absences will affect not only your attendance grade but also your class participation grade.

CASE REFLECTIONS

Each case studied in class will have a set of reflection questions. You will be required to submit at least 3 case reflections during the semester. These will be posted as assignments in your Canvas Calendar. They require you to read the relevant material and write your thoughts. You must submit your case reflections through Canvas by 8AM on the day of the relevant class. We will share the responses with the companies.

OPERATIONAL PROJECTS

The students will work in teams of 4-5 hand in hand with the instructors and sponsoring company representatives to achieve company goals. The first 3 weeks will be spent in properly defining the scope of the project and the metrics. Followed by 4 weeks of data gathering, analysis and solution design, ending with 3 weeks of implementation planning.

Deliverables include a detailed documentation of the project and a presentation in class.

PROJECT FEEDBACK

A very important course requirement is active involvement in project discussions and engagement with the sponsoring companies. You will be in charge of providing feedback to your peers on their projects and you will receive feedback on your project from your peers.

CLASSROOM NORMS AND EXPECTATIONS

Students are expected to adhere to CBS Core Culture in this class by being:

Present:

- On time and present for every session
- Attendance tracked

Prepared:

- Complete pre-work needed, expect cold calling
- Bring nameplates and clickers

Participating:

- Constructive participation expected and part of grade
- No electronic devices unless explicitly called for by the instructor

TENTATIVE COURSE OUTLINE

Note: Guest speakers have yet to be re-confirmed. Topics and content of classes may change depending on the availability of speakers and projects progress

Session	Date	Topic	Guest Speaker
Session 1	Jan 26th	<ul style="list-style-type: none"> - Introduction to the class - Operations Strategy & Different Ways of Winning - Meeting of Sponsoring Companies 	Terry Lundgren, Former CEO of Macy's & Deming Cup Winner
Session 2	Feb 2 nd	<ul style="list-style-type: none"> - Process Improvement Methodology: Project definition - The cases of TiendaPet (Chile) 	Beatriz Pardo, VP/GM Starbucks Roastery and Reserve Business
Session 3	Feb 9 th	<ul style="list-style-type: none"> - Process Improvement Methodology: Mapping - The case of 123Seguro (Argentina) 	Martin and Bruno Ferrari, co-founders, CEO and COO
Session 4	Feb 16 th	<ul style="list-style-type: none"> - Process Improvement Methodology: Measure - The case of XTM Bike, custom-made bikes to up-market customers. - The case of La Zarza (Mexico) 	Sidra Tufail, Director, SC Operations & Customer Service Latam & Canada
Session 5	Feb 23 rd	<ul style="list-style-type: none"> - Process Improvement Methodology: Data and analysis - The case of Superfuds (Colombia) - Deming principles and philosophy 	Sebastian and Esteban Hernandez, Superfuds co- founders
Session 6	Mar 2 nd	<ul style="list-style-type: none"> - Process Improvement Methodology: More on data and analysis - Focused Factory: Aravind Hospital (India) - The case of Iluméxico (Mexico) 	Manuel Wiechers, Founder and CEO
Mar 6-10: Final exams for first half-term (A-term) courses			
Mar 13-17: Spring break			
Session 7	Mar 23 rd	<ul style="list-style-type: none"> - Process Improvement Methodology: Process re-design - The case of Bodytech (Colombia) 	Diana Vesga, COO Los Angeles County Museum of Art (LACMA)

Session 9	Mar 30 th	<ul style="list-style-type: none"> - Process Improvement Methodology: Implementation planning - The case of Verdissimo (Spain) 	Ole Faarbaek Jensen, CEO of Verdissimo
Session 10	Apr 6 th	<ul style="list-style-type: none"> - Process Improvement Methodology: Implementation issues and control - The future of work and role of technology - The Container Case at International Paper 	Karen Jordan, CSCO Pepsi Co Beverages
Session 11	Apr 13 th	<ul style="list-style-type: none"> - Project Management Projects Final Presentations, Feedback and Discussion 	Kristin Peck, CEO of Zoetis
Session 12	Apr 20 th	<ul style="list-style-type: none"> - Projects Final Presentations, Feedback and Discussion 	Christina Topsoe, Vice Chair, Topsoe Holding A/S and Co- Founder The Four Horsemen