Process Improvement and Growth
Master Class - Spring 2022

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Class Schedule: Wednesday 5:40PM-8:55PM; Full Term, January 26 – April 20, 2022

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, 3-4 MBA/EMBA students and 1-2 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 come from The Columbia-Harlem Small Business Development Center (SBDC) so this course also offers the opportunity for students to help small businesses in the Harlem and Southern Bronx neighborhoods. Companies provide the data and context; faculty provides guidance on best practices and teams will provide the analysis and solutions.

One can have the most innovative idea, a product that the market is hungry for, and all the capital to meet the financial needs but unless there is a plan for implementation, in a timely manner, to deliver a quality outcome, the idea remains just an idea. The course will emphasize the process of creating actionable recommendations on important problems, meeting deadlines.

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/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.

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<thead>
<tr>
<th>Attendance</th>
<th>1</th>
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<tbody>
<tr>
<td>Participation</td>
<td>3</td>
</tr>
<tr>
<td>Case</td>
<td>1</td>
</tr>
<tr>
<td>Operational</td>
<td>4</td>
</tr>
<tr>
<td>Project</td>
<td>1</td>
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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

Syllabus “Process Improvement and Growth” Spring 2022
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 a HP for the course grade.
- Students that miss 2 sessions (unexcused absences) will receive 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.

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, Prepared, and Participating.

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

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Topic</th>
<th>Guest Speaker</th>
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| Session 1 | Jan 26th | - Introduction to the class  
- Operations Strategy & Different Ways of Winning  
- Meeting of Sponsoring Companies | Tim Knoll, Executive Vice President and COO at Food Authority |
| Session 2 | Feb 2      | - Process Improvement Methodology: Project definition and Mapping  
- The cases of TiendaPet (Chile) | TiendaPet co-founders, Rodolfo Borutzky and Alan Turski |
| Session 3 | Feb 9      | - Performance capacity  
- Focused Factory: Aravind Hospital (India) | TBA |
| Session 4 | Feb 16     | - Process Improvement Methodology: Data gathering and analysis  
- The case of 123Seguro (Argentina) | Martin and Bruno Ferrari, co-founders, CEO and COO |
| Session 5 | Feb 23     | - Process redesign  
- The case of XTM Bike, custom-made bikes to up-market customers | Daniel Ramot – VIA founder and CEO |
| Session 6 | Mar 2      | - Process Improvement Methodology: Implementation and Control  
- The case of Iluméxico (México) | Manuel Wiechers, Founder and CEO |
| Session 7 | Mar 9      | - Deming principles and philosophy  
- Purposeful Leadership | Hubert Joly, former CEO of Best Buy |
|          |            | **Spring break (Mar 14-18)**                                        |                                                                                                |
| Session 8 | Mar 23     | - Planning for growth  
- The case of Verdissimo (Spain) | Ole Faarbaek Jensen, CEO of Verdissimo |
| Session 9 | Mar 30     | - Implementation Issues  
- The Container Case at International Paper | Eli Carmeli, CEO & President, Valid USA |
| Session 10 | Apr 6     | - The future of work and the role of technology  
- Lessons from Beleza Natural | Leila Velez, founder and former CEO of Beleza Natural |
| Session 11 | Apr 13 | - | Project Management Projects Final Presentations, |
| Session 12 | Apr 20 | - | Projects Final Presentations, Feedback and |