

MBA – Focusing on Entrepreneurship, Innovation & Technology Management

Syllabus

Course Title: Project Management and Control

Course Number: 098712

Number of credit points 2_____

Mini-Semester: 7 of the Academic Year: 2024

Time: (Day & Hour) Thursday 18:00-21:30

Course Instructor: Dr. Michal Iluz

E –mail: iluzmichal@gmail.com; michal.iluz@technion.ac.il

Additional Instructor: **Mr. Eyal Ronen**

Meeting time for students: by appointment

Course Instructor: Meirav Rimon

E –mail: meirav06@gmail.com

Meeting times for students: by appointment

Course Objectives: A systematic presentation and analysis of the approaches, techniques and tools used in project management with a focus on New Product Development (NPD) projects.

Course Content & Scope:

In today's world New Product Development (NPD) projects are critical to the success and survival of organizations. This course is aimed at teaching the tools and techniques developed to support the NPD process, to gain insight from real NPD success and failure case studies and to implement the tools, techniques and insights in a simulated environment.

Teaching Methods:

The course is based on the methodology developed at the Technion.

The Project Team Builder simulator developed at the Technion will be used as a platform for hands on, active learning of the course material.

<http://www.sandboxmodel.com/content/ptb%E2%84%A2-training>

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Teaching Materials:

Text book

Project Management: Processes, Methodologies, and Economics, 3rd Edition

Avraham Shtub, The Technion-Israel Institute of Technology

Moshe Rosenwein, Columbia University

Readings (Recommended) :

Innovation and Entrepreneurship Creating New Value

By Danny Samson, Marianne Gloet

Published November 2015 ISBN: 9780190300630

http://www.oup.com.au/titles/higher_ed/business__and__economics/business/9780190300630

Additional material

Power Point slides.

Project Management simulator _ PTB the Project Team Builder training simulator.

COURSE DESCRIPTION

The percentage of sales of successful business organization tied to the successful introduction of new products and services is high. Given the fact that the failure rate of these introductions is also high there is a need for tools and techniques to manage the NPD projects. This course will focus on the tools, techniques and best practices developed to support projects aimed at development and marketing of new products and systems.

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The course will cover the following issues:

Introduction

The NPD environment, Critical Success Factors (CSF) in NPD.

Starting the NPD process

Front End Loading: Understanding the market and the voice of the customers, mapping the Stake holders, selecting alternatives.

Planning the NPD process

Time, Cost, Performance(Value) and Risk considerations. Team Building and shared understanding. Integration of requirements using the Pareto Efficient frontier.

Executing the NPD process

Monitoring and Control of the NPD process.

ATTENDANCE

All students are expected to attend all classes. Missing a class means missing a part of the course. Necessary absences and tardiness must be discussed with the instructor or the TA and approved in advance.

Student Assessment:

1. Individual assignments 20%
2. New Product Development project presentation (**week seven**) 30%
3. New Product Development project final report (**a week after the last class meeting**) 50%

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Assignments

Individual assignment:

Each student must take the e-Learning course:

<https://www.coursera.org/learn/new-product-development>

and submit the course assignments of modules 1-10 according to published schedule.

Team assignment:

Each student is assigned to a team of students. Team work is a very important aspect of this course. It is essential that students registered for the course and assigned to teams will be fully committed and will not drop the course, as every team member counts. **If you are not sure that you can attend all lectures and do all the assignments please do not register to the course.**

New Product Development presentation and final project

Each student will be assigned to a New Product Development project team.

Each team will present its final project during the last class meeting. Each team will prepare PowerPoint slides of the presentation that will be handed in to the instructor and TA by **midnight (EST) of the day before the seventh class meeting**. Each team will have 15 minutes to present the "story" as well as preliminary analysis based on course material.

The team will use the Project Team Builder platform to simulate the NPD process and will submit the following reports **in English one week after the last class meeting**.

1. NPD project description: A detailed description of your project including:

- Introduction to the product and the environment
- Stakeholders, Voice of the Customers and Requirements
- Economic aspects
- Scope aspects
- Organization aspects
- Scheduling aspects
- Resources aspects
- Budgeting aspects
- Integration aspects
- Communication aspects

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- Risk aspects
- Monitoring and control aspects

The project description is a Word document of up to 10 pages. You can add an appendix with pictures videos and links to websites.

2. Scenario file based on the above information.

Submit the file created by the Scenario builder program that comes with the PTB simulator (scn file).

3. NPD Project plan.

A Word document of up to 10 pages that explains the logic you used in planning the NPD project including: the voice of the customer and technology issues, the value to the customer, how you decided to select dates and modes for each activity, how you decided on the resources used including hiring and firing decisions, your budget and cash flow considerations and your risk analysis and risk mitigation.

4. Results of NPD project execution on PTB (summary reports of ten runs based on the above plan).

The results are summarized and explained in a Word document of up to 10 pages. The focus is on the Pareto efficient frontier of possible NPD approaches and the selected NPD solution. Submit the ten runs reports generated by the PTB.

5. Summary and lessons learned

A Word document of up to 5 pages that explains the results you got in light of the plan you created. Please explain why your plan is the right one in light of the simulation results and the efficient frontier, what in your opinion are the main lessons learned and conclusions from the assignment and how in your opinion the assignment could be improved.

6. Appendix:

- Additional information such as videos, excel files etc.

Presentations will be graded by students in class as well as the instructor and the TA.

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Course Plan
Tentative Schedule

Session	Date	Topic	Assignment Due
1	21/3/24	Introduction	-
2	28/3/24	Starting the NPD Process	Coursera course modules 1,2
3	4/4/24	Planning the NPD Process part 1	Coursera course modules 3,4
4	11/4/24	Planning the NPD Process part 2	Coursera course modules 5,6
5	18/4/24	Planning the NPD Process part 3	Coursera course modules 7,8
6	2/5/24	Executing the NPD Process	Coursera course modules 9,10
7	9/5/24 15:00-18:30	Final Presentation	NPD Project Presentations
-	16/5/24		NPD Project Final Report