

Course Syllabus

Managing New Product Development Projects

<https://globalnetwork.io/course/new-product-development>

Instructor

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Zoom - online classroom (video and audio)

Secondary Zoom connection

COURSE OBJECTIVES

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 methodologies (such as Waterfall, Agile and Lean) used for NPD along with the tools and techniques developed to support each methodology, to gain insight from NPD success and failure case studies and to implement the tools, techniques and insights in a simulated environment.

COURSE SCHEDULE

~~Lectures: Tuesdays (see exact times in table) all times in Israel time.~~

~~First class will be on October 29, 2024, last class on December 10, 2024.~~

COURSE DATE & TIME

synchronous class meetings: ~~Tuesdays 16:00-18:00 (Israel time); October 29, November 5, 12,19, 26 December 3,10.~~

~~final presentations on December 10, 16:00 – 19:00 (3-hour class).~~

~~Final project is due December 17. Detailed schedule:~~

Session	Date	Time (Israel time)	Topic	Team work
1	October 29, 2024	16:00-18:00	Introduction, Assigning Students to Teams and NPD Projects	Each team will meet after class to discuss the application of class material in the final project.
2	November 5, 2024	16:00-18:00	Starting the NPD Process	Each team will meet after class to discuss the application of class material in the final project.
3	November 12, 2024	16:00-18:00	Planning the NPD Process part 1	Each team will meet after class to discuss the application of class material in the final project.
4	November 19, 2024	16:00-18:00	Planning the NPD Process part 2	Each team will meet after class to discuss the application of class material in the final project.
5	November 26, 2024	16:00-18:00	Planning the NPD Process part 3	Each team will meet after class to discuss the application of class material in the final project.
6	December 3, 2024	16:00-18:00	Executing the NPD Process	
7	December 10, 2024	16:00-19:00	Final Presentations, Filling out a Questionnaire	NPD Project Presentations, Filling out a Questionnaire
-	December 17, 2024	until 23:59	Final Report, Recommendations for NPD projects	Team NPD Project Final Report, Team NPD Project Recommendations

COURSE COMMITMENT

Students will be assigned to teams. Teamwork is a very important aspect of this course. Team members from different countries will have the opportunity to work together and to get to know each other. Each team will meet after each class to plan its work for the next week, and to schedule its meetings during the next week. 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 count.

If you are not sure that you can attend all lectures and complete all the assignments, please do not register to the course.

COURSE MATERIALS

Textbook

Shtub, A., M. Rosenwein, Project Management: Processes, Methodologies, and Economics, 3/E, Pearson, 2016.

<https://www.amazon.com/Project-Management-Processes-Methodologies-Economics/dp/0134478665>

Online course material

The Waterfall methodology

Introduction to Project Management: Learn by Simulation

[Introduction to Project Management: Learn by Simulation | Udemy](#)

The Agile methodology

Hands-on Agile Management using the Agile Advisory Simulator

[Hands-on Agile Management using the Agile Advisory Simulator | Udemy](#)

Students will get free access to these courses.

Software

The Agasim Agile simulator

Students will get free access to the Agasim simulator:

The Project Team Builder simulator

The Project Team Builder simulator will be used as a platform for hands on, active learning of the course material. **Each student must purchase the software (unless the school purchase it for the student) at:**

<http://www.sandboxmodel.com/content/ptb-training-simulator-coursera-npd-course>

Software that allows Mac to access the project management simulator and builder:

1. "Citrix"
2. "Parallels for Mac"
3. "Virtualbox"

COURSE ATTENDANCE

This is a flipped classroom (“an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home and engage in concepts in the classroom with the guidance of a mentor.” – Wikipedia).

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. **At most one class can be missed** with permission.

COURSE DESCRIPTION

The percentage of sales of successful business organizations 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 to select the right methodology and to implement the proper tools and techniques correctly to manage New Product Development (NPD) projects. This course will focus on the methodologies, tools, techniques and best practices developed to support the initiation, planning, execution, monitoring and control of projects

aimed at developing and marketing new products and services. 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 stakeholders, selecting alternatives and deciding when to introduce the new product or service to the market.

Planning the NPD process

NPD methodologies: Waterfall, Agile and Lean. Time, cost, value and risk considerations. Team building. Integration of requirements using the Pareto efficient frontier.

Executing the NPD process

Monitoring and control of the NPD process.

COURSE GRADING

Each student registered for the course will get a grade. Students that do not attend classes or do not work with their teams will get a failure grade that will be reported to their university.

No.	Task Type	Percentage of total grade	Comment
1	Class participation	20%	
2	New Product Development project team presentation	20%	Presentations on December 10, 2024
4	New Product Development project final team report, Team NPD Project Recommendations (we will use peer evaluation)	60%	Submission of final team report one week after last class meeting, December 17, 2024

COURSE ASSIGNMENTS

Class participation

1. Each student must take the eLearning courses:

The Waterfall methodology : Introduction to Project Management: Learn by Simulation. The course is on the Udemy platform. A link to the course is:

[Introduction to Project Management: Learn by Simulation | Udemy.](#)

2. The Agile methodology: Hands-on Agile Management using the Agile Advisory Simulator . The course is on the Udemy platform. A link to the course is:

[Hands-on Agile Management using the Agile Advisory Simulator | Udemy](#)

Team Assignment - New Product Development Presentation

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 (Israel time) of the day before the seventh-class meeting**. Each team will have **10 minutes to present the "story"** as well as a preliminary analysis based on course material and on any material relevant to the project.

Team Assignment - New Product Development Final Report

Teams will use the Agasim and the Project Team Builder platforms to simulate the NPD process. Each team will submit the following documents **one week after the last class meeting**:

1. *NPD Project Description:*

A detailed description of your project including:

- Introduction to the product or the service and to the environment
- Stakeholders, Voice of the Customers and requirements
- Economic aspects
- Competition, regulation and the market
- Scope aspects
- Organization aspects
- Scheduling aspects
- Resources aspects
- Budgeting aspects
- Risk aspects

- Monitoring and control aspects

The project description is a **Word document**. You can add an appendix with pictures, videos and links to websites.

2. NPD project plan

A **Word document of up to 10 pages** that explains the logic you used in planning the NPD project using each methodology including: the value to the customer, the efficient frontier and trade-off analysis.

3. NPD project results (of NPD project execution on the two simulators)

The results are summarized and explained in a **Word document of up to 10 pages**. The focus is on the simulated outcome of the project in each methodology.

4. Summary, lessons learned and recommendations

A **Word document of up to 5 pages** that explains why your plan is the right, which of the NPD methodologies is most appropriate for your NPD project, and why.

A. Appendix

Additional information such as videos, excel files etc.

Evaluation of presentations

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

Each student will submit an evaluation form for each of the team presentations. Evaluation forms will be submitted by **midnight of the day after the presentation (Israel Time)**. The **evaluation form** (that includes five criterions the groups need to be evaluated on) **will be available on Moodle**.

Evaluation form will be available on the course website

Date_____

Presentation title_____

Presenters_____

Evaluator_____

Criterion	Maximum Possible Points	Points awarded	Comments
1. Organization and Clarity	10		----- ----- ----- ----- -----
2. New knowledge and insight provided	35		----- ----- ----- ----- -----
3. Application of knowledge discussed in the class	15		----- ----- ----- ----- -----
4. Significance of conclusions	25		----- ----- ----- ----- -----
5. Effective answers to questions	15		----- ----- ----- ----- -----
Total score			

Additional comments
