

COURSE TITLE:
INNOVATION MANAGEMENT

Course Number: 099792

**2.0 Credit
points**

**Mini-
Semester: 2,7**

Year: 2024

**Number of
weeks:7**

**Day:
Thursday**

**Time:
14:00-17:30**

COURSE INSTRUCTOR:
PROF. MIRIAM EREZ

E-mail:
meretz@technion.ac.il

Room: Cooper 214
Office hours:
By appointment

Telephone: 04-
829-4461

Teaching Assistants:

TBD

Course website:

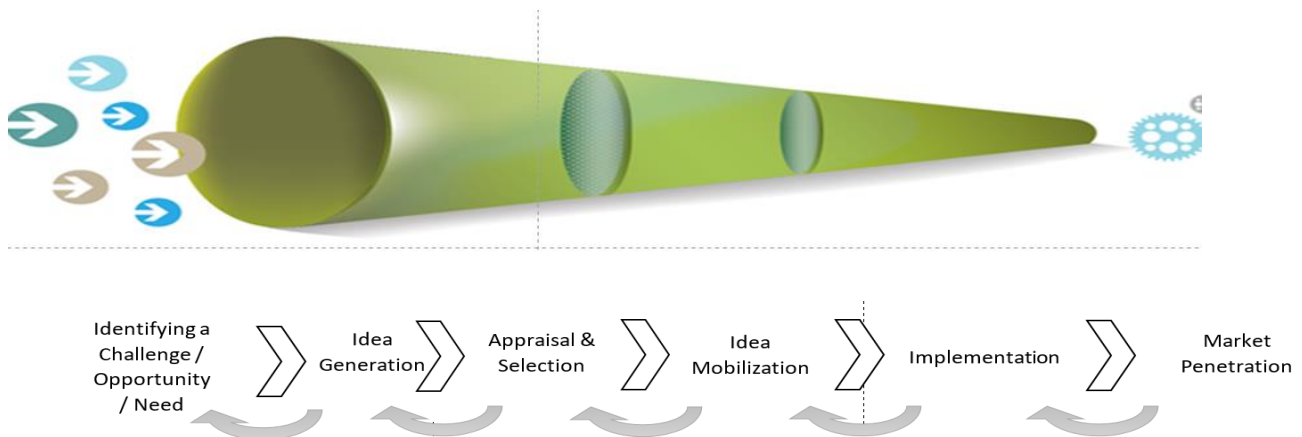
<https://moodle2324.technion.ac.il/course/view.php?id=1821>

SYLLABUS

COURSE GOAL and DESCRIPTION

This course focuses on managing the process of innovation in organizations along the six steps of the journey of the idea as shown in the Figure below. The course examines the organizational and global ecosystems that stimulates or inhibit innovation, the managerial behavior that supports innovation, decision criteria for promoting innovation, decision gates along the process, methods for overcoming resistance to change and successful implementation of the final innovative product, service or process.

MBA - Focusing on Entrepreneurship, Innovation & Technology Management



COURSE OBJECTIVES:

The objectives of this course are threefold: (a) **Knowledge Acquisition:** Teach a methodology and tools for managing the innovation process in organizations from the first stage of identifying the challenge, problem, or opportunity throughout the entire process towards the final stage of market penetration, reaching the end-users. The course offers relevant tools and methods for each of the six stages.

(b) Highlights the critical role of the ecosystem, the organizational structure and culture, and the role of leaders in innovation. The leader's dilemma of taking the risk to invest in innovation (exploration) that may fail versus exploiting the current operations (exploitation). (c) **Implementation:** The challenges of introducing change from the management and the employees' perspectives. Throughout the course, the students will practice utilizing the tools for each phase.

LEARNING OUTCOMES

At the end of this course, the students will know how to manage a process of innovation in their organization, along the six steps of the model. The students will learn to use tools for the ideation phase, including identifying a problem or an opportunity, generating creative ideas for solving the problem and evaluating alternative creative solutions that they generated. Next, they learn how to communicate novel ideas to get acceptance and overcome resistance to change. Then, they learn about moving the solution concept to the implementation stage and managing the implementation stage and the market penetration.

CONTENT & SCOPE: The course content consists of lectures, cases, and the use of methods and tools learned for managing the innovation process. Each class meeting will focus on one phase in the innovation process. A detailed description of each one of the course meetings appears below. Eaching

TEACHING MATERIAL: Teaching materials consist of class lectures, some readings, class discussions, class exercises to practice the methods and tools learned, and guest speakers.

READINGS: All teaching material (except recommended books) will be available on the course Moodle.

ASSIGNMENT AND GRADING PROCEDURES.

- 1) **Personal Class Attendance:** Attendance in 6 out of 7 class sessions.
- 2) **15% - Active Participation:** Reading the course material and active participation in class discussions.
- 3) **70% - Final team project** (in the form of PowerPoint Presentation). The final team project consists of the six parts that build the innovation process plus the integration. (Each part is 10% of the final project + 10% for integration).

April 3, 2024: Submission of the first three parts of ideation in the mid-course, Jan. 18. Feedback will be offered.

May 2/2024-May 8/2024: Submission of the final PPT team project +integration

- 4) **15% - Final presentation of the team project on 09-05-2024** (8 min & 2 min. Q&A).

COURSE REQUIREMENTS AND COURSE POLICIES

General recommended readings

1. דדי פרלמוטר, מוליכים להצלחה. 2021

2. Safi Bahcall Loonshots (2019). How to Nurture the Crazy Ideas That Win Wars, Cure Diseases, and Transform Industries.
בעברית: ספי בקל. הבלחות איך לטפח רעיונות פורצי דרך שמרפאים מחלות, מנצחים במלחמות ומשנים תעשיות
 3. Vijay Govindarajan (2016). The three-box solution: A strategy for leading innovation. Boston: Mass: Harvard Business Review Press.
(see on Moodle a summary and a video) <https://www.youtube.com/watch?v=wgD2VzFqCaE>
 4. Nathan Furr & Jeff Dyer (2014). The Innovator's Method: bringing the lean startup into your organization. Boston Mass. Harvard Business Review Press. (see Ch. 1 on Moodle)
-

Class 1 (14/03/2024)

- a. **Introduction: Concept clarifications – Creativity, Invention, Innovation. Types of innovation and levels of innovation and the Exploration- Exploitation dilemma (Risk vs. ROI; Change vs. Successful routine).**

b. The problem identification phase.

Class Exercise: Challenge/problem/opportunity Identification, the Fishbone Tool.

Reading:

- Christensen, C.; Raynor, M.E. & McDonald, R. What is disruptive innovation? (Dec. 2015). *Harvard Business Review*. <https://hbr.org/2015/12/what-is-disruptive-innovation>

• דדי פרלמוטר. מובילים להצלחה. משכל, ידיעות אחרונות. 2021

Recommended

- Sawhney, M., Wolcott, R., and Arroniz, I. (2006). The 12 Different Ways for Companies to Innovate, *MIT Sloan Management Review*, 47 (3) p.75-82
- Simon Sinek (2009). Start with Why. How great leaders inspire everyone to take action. NY: Portfolio, Penguin. Video: <http://www.youtube.com/watch?v=l5Tw0PGcyN0>

For the team project part 1: As a team, select one organization/business for which you would like to develop an innovation project. Consider the main challenges faced by the organization, using the Fishbone methodology that you practiced in class, and come up with a challenge or a problem that you want to solve or an opportunity that you want to promote. Describe the challenge/opportunity/problem And analyze the causes for it, using the fishbone diagram.

Class 2 (21/03/2024)

a. Who are the Creative individuals and the innovative teams?

b. The ideation phase: Individuals' and teams' creative idea generation, in response to the identified challenge/opportunity/need and the selection of the idea for implementation.

Class Exercise: Idea generation - a brainstorming exercise and other tools. Criteria for selecting one idea for implementation as the solution to the problem, versus other ideas.

Reading:

- Amabile, T. (2012). Componential Theory of Creativity (2012) HBS Working Paper, 12-096.
- Dyer, J., Gregersen, H., and Christensen, C. 2009. The Innovator's DNA, *Harvard Business Review*, 87 (12), p. 60-67

For the team project Part2: For the challenge/problem/opportunity that your team identified, generate novel ideas, state all of them, and suggest three potential ideas for implementation by order of

preferences, with #1 as the most preferred idea, and explain why you chose the specific idea for a solution versus other ideas, using the tools and criteria learned in class.

Class 3 (28/03/2024)- Solution validation

(a) Tools for idea verification for implementation

(b) Design Thinking: Validate your solution and revise it accordingly.

Class exercise: Practicing the Design Thinking method.

Reading:

Brown, T. (2008) Design Thinking, *Harvard business review*, 2008

For the team project part3: Validate your solution by observing and talking to potential users. Reshape your solution based on the empathy map.

Submission of the first three parts by April 3, 2024

Class 4 (04/03/2024)

The organization eco-system: Leadership and organizational culture for innovation

Class Exercise Map your organizational culture using the survey tool

Reading:

- Isaacson, W. The real leadership lessons of Steve Jobs. *Harvard Business Review*, June 2012.
- Recommended: Miron, E., Erez, M., Nave, E., 2004. Do Personal Characteristics and Cultural Values that Promote Innovation, Quality, and Efficiency Compete or Complement Each Other? *Journal of Organizational Behavior*, 25, p. 175-199.

For the team project part4: Analyze potential risk versus gain and the likelihood for change. Consider the organization's strategy, its business success, and its openness to new ideas and their implementation

Class 5 (11/04/2024)

Getting to “yes” when implementing innovation.

Class Exercise: A methodology for implementing change by overcoming resistance to change.

Reading:

- Cialdini, R.B. (2001). Harnessing the Science of Persuasion. *Harvard Business Review*, 72-79.

Recommended:

- Dutton, J., Ashford, S., O'Neil, R., & Lawrence, K. (2001). Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, 44 (4), 716-736.

For the team project part 5: Identify sources of support and obstacles for implementing innovative solutions and propose a program for overcoming the barriers.

Class 6 (18/04/2024)

Implementing and getting to the user.

Class exercise: How to get to the user and offer the best user experience and added value.

Reading: Leonardi, P.M. & Barley, S.R. (2010). What's Under Construction Here? Social Action, Materiality, and Power in Constructivist Studies of Technology and Organizing. *Academy of Management Annals*, Vol.4 #1. 1-51.

For the team project part 6: Prepare “the last mile” of getting to the user and offering a unique user experience and added value.

Class 7 (09/05/2024)

Presentation of final team project - 8 minutes per team + 2min. Q&As.

Submission between 02-05-2024 to 08-05-2024
