

## *The Hebrew University of Jerusalem*

### *Syllabus*

## **CENTRAL TOPICS IN PROJECTS MANAGEMENT AND ENVIRONMENT IN AGRICULTURE - 71422**

*Last update 19-10-2022*

*HU Credits:* 2

*Degree/Cycle:* 1st degree (Bachelor)

*Responsible Department:* Biochemistry & Food Sciences

*Academic year:* 0

*Semester:* 1st Semester

*Teaching Languages:* Hebrew

*Campus:* Rehovot

*Course/Module Coordinator:* ms. sigal cohen ogen

*Coordinator Email:* [sigalogen@gmail.com](mailto:sigalogen@gmail.com)

*Coordinator Office Hours:*

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Teaching Staff:

Ms. Sigal Cohen Ogen

Course/Module description:

Project Management Course is a course that gives participants exposure to the project toolbox that is currently accepted in the industrial world in the State of: large and small organizations, smart industries and low-tech industries, start-ups and veterans. The toolbox is a management infrastructure that enables effective management and reaching optimal business results.

The course reveals to learners the history of the development of the project management world alongside the current contemporary tools (including the Industry 4 Industry Revolution we are facing)

Students enrolled in the course are not required to come with prior knowledge.

In the first semester - the study is conducted in lectures (including industry guest lectures) and exercises that include real-world case analysis

In the second semester - the study will take place in 2 courses combined:

Track A - 120 semester hours - Industry specialization

Track B - Peer Study Meeting (Small Group Learning) - The purpose of the meeting is to discuss the dilemmas and realities that the student is exposed to and analyze them in the project toolbox (taught in Master A) in order to embed the tools into the realities of the contemporary world of work.

Course/Module aims:

- Knowledge of the principle structure and processes that exist in the project.
- Knowledge of unique terminology for the world of project management.
- Knowledge of project management tools
- Knowing the world of projects - in the business world in general and in the industrial world in particular
- Practical practice of project management tools

Learning outcomes - On successful completion of this module, students should be able to:

Course Outputs

1. Preparing students for integration into the industrial employment world
2. . Knowledge of the project toolbox language that includes: accepted methodologies from the industrial design world, life cycle management, organizational structures (hierarchical, metric, network), planning and control processes, and measurement processes throughout the life of the project to meet project objectives.
3. Developing personal work skills that enable work independently (task

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management) alongside working as a team member (project); Skills that include end-to-end understanding of the entire project unit chain and their integration alongside managing each unit independently.

4. Knowledge of the world of concepts and the need for innovation in the promotion of advanced and innovative projects

5. Preparing students to understand how organizations are run and promoted projects.

Attendance requirements(%):

100%

Teaching arrangement and method of instruction: First Semester:

- Lecture - Presentation
- Classroom practice
- Practice - home task

Second semester

- practical work
- Peer study sessions

Course/Module Content:

- Introduction: defining what a project is;
- Major project management challenges
- Project lifecycle
- Existing project management methods (Waterfall / Model V, Agile, constraint theory and critical chain)
- Success and failure factors of a project
- Project life cycle - dividing the project into phases, switching between stages, surveys and milestones
- How was a project born?
- Initiation phase
- Approval or disapproval of the initiation phase
- Examining alternatives
- Project planning - setting goals; Define project content
- Project Documents - Specification

Scope of Work

- Project High School - product QFD, programming testing, pre-project, alternative selection
- Continued planning phase: project scheduling - network diagram, schedule creation (Gantt), early and late scheduling, critical path, PERT method,
- Guest lecture (from industry)
- project success metrics;

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- *Project Budget - Cost Estimation, Cost Allocation, Budget Baseline*
  - *Project Aspects - Project Team, Project Team Development, Project Team Motivation, R&R Matrix*
  - *The roles and skills of the project manager*
  - *The role and skills of the project team, the contribution of each team member in the project*
  - *Meaning of initiative among project team members*
  - *Project management ethics*
  - *Project management leadership*
  - *Management and professional skills*
  - *Communication Management - Project Communication Channels, Communication Matrix, Methods and Procedures for Project Communication*
  - *Organizational Structure; The role of the project manager and project staff in promoting the project towards the interfaces - personal and team leadership*
  - *Mapping and managing stakeholders in the project*
  - *Building the "project spirit"*
  - *Project monitoring and control - When to plan?*
  - *Project Progress Monitoring - Control Meetings, Setting and Management Milestones, Gant Tracking, EVM Method*
  - *Industry guest lecture*
  - *Risk management and project opportunities*
  - *Managing time intervals and resources under constraints and uncertainties*
  - *Change control management*
  - *Organizational Structures in Project Management - Project Structure, Matrix Structure, Weak Matrix / Strong Matrix*
  - *Project Quality Management - Quality Methods, Project Management Quality*
  - *Project product quality management*
  - *Knowing the world of devices. For example: ISO, GMP*
  - *Closing the project - When do you declare?*
  - *Completion processes and project delivery*
  - *Maintenance project - what does operational mean? How long?*
  - *Required changes immediately after delivery - Proper management of the situation*
  - *Project debriefing (success and failure)*
  - *Lessons learned - 'What do we take as an aside?'*
  - *Use of the organizational asset - knowledge - collection and retention for the following projects*
  - *Post Mortem vs Pre Mortem - Pros and Cons of each method*
  - *Project decision making - who is decisive?*
  - *Decision-making tools*
  - *Making decisions in urgent situations - Who are the project manager's partners?*
  - *Examining projects according to the constraint triangle*
  - *Examining the difference in project management in various sectors: veteran companies, startup, technological, food industry, academia, agriculture, the medical industry and more*
  - *Industry guest panel*

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Required Reading:

*Will be given during the semester*

Additional Reading Material:

Course/Module evaluation:

*End of year written/oral examination 0 %*

*Presentation 40 %*

*Participation in Tutorials 20 %*

*Project work 0 %*

*Assignments 40 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 0 %*

*Other 0 %*

Additional information: