

Name of the module: Operations Management

Number of module: 686-1-0025

BGU Credits: 3

ECTS Credits: 4.5

Academic year: II

Semester: Spring

Hours of instruction:

Monday 17:00-20:00

Location of instruction: TBD

Language of instruction: Hebrew

Cycle: B.A

Position: Obligatory course for
BA students.

Field of Education: Operations
Management.

Responsible department: Health
Systems Management

General prerequisites: Statistics

Grading scale: 0-100

Course Description: An introductory undergraduate course that presents fundamental concepts of operation management with focus on the healthcare system. This course teaches how managers in the healthcare system deliver services effectively and efficiently.

Aims of the module: Get acquainted with models of operations management and understand when and how to use them in healthcare systems.

Objectives of the module: To introduce principles and analytic tools in operation management, including: forecasting, inventory management, project management theory and software utilization, focused operations management, Pareto bottleneck analysis, Theory of Constraints, and value chain analysis.

Learning outcomes of the module: On successful completion of the course, the student should be able to:

1. Analyze time series data and formulate modeled predictions
2. Select and apply models of inventory planning
3. Optimize scheduling of healthcare resources
4. Calculate length, resources and all other parameters of a project.
5. Implement a complex project plan on MS Project software
6. Analyze and define priorities by Pareto bottleneck analysis
7. Evaluate and quantify the value chain of health systems.
8. Assess the overall performance of health systems and the effect of potential improvements.

Attendance regulation: Will be finalized according to BGU's guidelines by the start of the semesters

Teaching arrangement and method of instruction: Lectures, exercise classes.

Assessment:

1. 10 Exercises	20%
2. Class project-	20%
3. Final exam –	60%

	100%

Work and assignments: 10 exercises; 1 project and final exam.

The final exam will on campus or online with oversight.

Time required for individual work: in addition to attendance in class, the students are expected to do their assignment and individual work for approximately 2 hours a week

Lecturers: Dr. Ronen Arbel

Dr. Asaf Tuval

Teaching assistant:

Gal Helen Haim

Contact details:

Email: ronenar@bgu.ac.il

tuval@bgu.ac.il

galhelenwolf@gmail.com

Office hours: By appointment

Module evaluation: at the end of the semester the students will evaluate the module, to draw conclusions, and for the university's internal needs

Confirmation the syllabus was confirmed by the faculty academic advisory committee to be valid on 2020

Last update: September 2020

Module Content\ schedule and outlines:

Lecture	Topic	Readings
1	Forecasting 1	Nahmias, 2001- Chapter 1, pp. 75-99
2	Forecasting 2	Nahmias, 2001- Chapter 1, pp. 99-104
3	Inventory Management	Nahmias, 2001- Chapter 4, pp. 231-244. Globerson, 2000- Chapter 2
4	Scheduling	Nahmias, 2001- Chapter pp. 607-671
5	Project Management 1 :	Globerson and Shatov, 2004- Chapter 1
6	Project Management 2	Globerson and Shatov, 2004- Chapter 2
7	Focused operations Basics	Ronen et al., 2018- Chapter 1
8	Pareto	Ronen et al., 2018 pp. 29-43
9	Theory of Constraints	Ronen et al., 2018- pp. 75-117
10	Lean value chain	Ronen et al., 2018- pp. 163-189
11	Strategic gating and complete kit/Soroka ED guided tour	Ronen et al., 2018- pp. 191-204
12	Focused operations case study	
13	Course summary and test prep	

Bibliography:

1. Nahmias I. Production and Operations Analysis. 2001. Boston, MA: McGraw-Hill/Irwin.
2. Globerson S. 2000. Operation management and performance improvement [Hebrew]. Tel-Aviv: Cherikover Publishing.
3. Ronen B., Pliskin JS, Pass S. 2018. The Hospital and Clinic Improvement Handbook: Using Lean and the Theory of Constraints for Better Healthcare Delivery. Oxford Press.
4. Globerson S, Shatov A. 2004. Project management [Hebrew]. Tel-Aviv: Dionon Publishing.