



# *The Hebrew University of Jerusalem*

## *Syllabus*

### **AGRICULTURAL PLANNING - 71734**

*Last update 22-02-2016*

*HU Credits:* 3

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

*Responsible Department:* environmental economics & management

*Academic year:* 2016

*Semester:* 2nd Semester

*Teaching Languages:* Hebrew

*Campus:* Rehovot

*Course/Module Coordinator:* Dr.Ziv Bar-Shira

*Coordinator Email:* [ziv.barshira@mail.huji.ac.il](mailto:ziv.barshira@mail.huji.ac.il)

*Coordinator Office Hours:* Tuesday 16:00-17:00

*Teaching Staff:*

---

Dr. Ziv Bar-Shira

Course/Module description:

Linear programming - formulation, graphical solution, the simplex method, solution with a computer software, duality and sensitivity analysis. Karush Kuhn Tucker Theorem.

Course/Module aims:

Formulation of problems as mathematical models and solving them.

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

Formulation of problems as mathematical models and solving them.

Attendance requirements(%):

70

Teaching arrangement and method of instruction: Lectures

Course/Module Content:

Objective function, decision variables, constraints, graphical solutions, matrix presentation, iso-income lines, pathological cases, problem formulations, shadow prices, tight constraints, sensitivity analysis, simplex method - table and matrix form, primal and dual problems and their meanings.

Required Reading:

None

Additional Reading Material:

Paris, Q., "An Economic Interpretation of Linear Programming".

Markland, R.E., "Topics in Management Science" (Chaps. 2-6).

Gass, S.I., "Linear Programming: Methods and Applications", 3rd edition. New York, McGraw-Hill, 1969. (Chaps. 1-6).

Library Holdings: 519.92/GAS

Dorfman, R., P.A. Samuelson, and R.M. Solow, "Linear Programming and Economic

---

*Analysis".*

*New York, McGraw-Hill, 1958. (Chaps. 1-7).*

*Library Holdings: 519.92/DOR*

*Course/Module evaluation:*

*End of year written/oral examination 90 %*

*Presentation 0 %*

*Participation in Tutorials 0 %*

*Project work 0 %*

*Assignments 10 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 0 %*

*Other 0 %*

*Additional information:*

*None*