האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

TREATMENT & RECYCLING OF AGRI. & MUNICIPAL WAST - 71611

Last update 07-09-2015

HU Credits: *2*

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

Responsible Department: *soil and water sciences*

Academic year: *0*

Semester: *1st Semester*

Teaching Languages: *Hebrew*

Campus: *Rehovot*

Course/Module Coordinator: *Prof Yitzhak Hadar*

Coordinator Email: *Yitzhak.Hadar@mail.huji.ac.il*

Coordinator Office Hours: *07:00-08:00*

Teaching Staff:
Mr. Dan Beit-Din
Dr.

Course/Module description:
Wastes from agricultural,industrial and municipal sources - origin,properties and quantities; solid waste handling in Israel; methods for collection; treatment and recycling of the organic matter component of wastes: (i) composting: process; technology; transformation of organic matter; microorganisms; (ii) methanogenic fermentation: process; energy production; wastes; (iii) recycling of lignocellulose; (iv) recycling of yard waste. Utilization of organic wastes in agriculture: agricultural fields,gardening,parks,forests,container media in greenhouses,animal feed. Recycling of wastes of specific value: paper,glass,plastic. Economic and legislative aspects of recycling.

Course/Module aims:
To learn on waster types
The ryecling situation in Israel and in the world
Recycling laws in Israel
Handling added value waste
Water recycling

Learning outcomes - On successful completion of this module, students should be able to:
Recognize different types of waste
Describe various ways of handling wastes
Recycle wisely
Recognize the legistlation regarding waste recycling
Handle added value waste

Attendance requirements(%):
100

Teaching arrangement and method of instruction: Lectures, trip

Course/Module Content:
1.Introduction and Definitions
2.Legislation

3.Waste treatment infrastructure
4.Integrated waste treatment
5.Construction waste
6.Waste to energy + waste sites Rehabilitation
7compost microbiology
8 Methane fermentation
9 white rot fungi

Required Reading:

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Additional Reading Material:

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Course/Module evaluation:

End of year written/oral examination 100 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:

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