



The Hebrew University of Jerusalem

Syllabus

ANIMAL PRODUCTION SYSTEMS & ENVIRONMENTAL POLLUA - 71815

Last update 07-10-2021

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Animal Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Prof. Jaap van Rijn

Coordinator Email: Jaap.Vanrijn@mail.huji.ac.il

Coordinator Office Hours: 8:30 - 17:00

Teaching Staff:

Prof Jaap Van Rijn,
Dr. Ilan Zadikov

Course/Module description:

The course provides a basic understanding of the various pollutants which are generated in animal production systems. Environmental pollution by waste discharge from these systems is discussed as well as treatment methods to combat such pollution. Lectures encompass both practical aspects of waste generation and treatment in animal production systems as well as more basic aspects of biological and physical processes underlying waste treatment.

Course/Module aims:

The aim of this course is to provide the students knowledge about the degree of waste production by the various animal production systems; how waste generated by such activities may affect the environment and what kind of treatment methods are available to combat waste discharge by the main animal production sectors

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

After completion of the course the students are aware of: (1) the degree of waste production by the various animal production systems; (2) how waste generated by such activities may affect the environment and (3) what kind of treatment methods are available to combat waste discharge by the main animal production sectors

Attendance requirements(%):

100

Teaching arrangement and method of instruction: frontal lectures

Course/Module Content:

Lecture topics:

1. Solid Waste - sources, amounts, potential damage to the environment
2. Aspects of solid waste in cattle breeding
3. Biological treatment
4. Liquid Waste - Overview of the Water Sector in Israel
5. Liquid waste - bins dairy farms
6. Liquid waste - biological treatment of animal waste
7. Pure treatment facilities
8. Waste of animals with emphasis on fish

Required Reading:

None

Additional Reading Material:

None

Course/Module evaluation:

End of year written/oral examination 90 %

Presentation 0 %

Participation in Tutorials 10 %

Project work 0 %

Assignments 0 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information:

None