האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

ETHICAL USE OF LABORATORY ANIMALS IN BIOMED. SCI - 94810

Last update 15-10-2015

HU Credits: 1

Degree/Cycle: 2nd degree (Master)

Responsible Department: bio-medical sciences

Academic year: 0

Semester: 1st and/or 2nd Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Rony Kalman

Coordinator Email: ronyk@huji.ac.il

Coordinator Office Hours: by appointment

Teaching Staff:
Dr. Rony Kalman

Course/Module description:
The course applies to all the future users of laboratory animals.
Participants in the lectures and the practical lab that will successfully pass the exam, will be given a permit to conduct research with laboratory animals.

Course/Module aims:

Learning outcomes - On successful completion of this module, students should be able to:
The students will understand the concept of ethical treatment of animals, what are the factors that influence laboratory animals.
The students will be able to perform basic experimental procedures with animals.

Attendance requirements(%):

Teaching arrangement and method of instruction:

Course/Module Content:
1. Standardization: Explaining the environmental, genetic and microbiologic factors effecting laboratory animals and their behavior. The significance of laboratory animal as a biological model and the importance of bringing them to a definite state to receive significant results by using minimum number of animals. Expression of different variables on research results. Explaining the differentiation between random species animals and hybrid animals and their significance to research.

2. Ethics: The contribution of laboratory animals to biomedical research. The importance of ethical research work for the results of laboratory animals used. The importance of the 3R's in a research. The ethical approach in Israel and at The Hebrew University in accordance with Israeli Law and Regulations.

3. Biology of the mouse, rat, guinea pig, rabbit and hamster. The history of different species used in biomedical research. Explaining different species and strains and their importance to research. The significance of maintenance equipment types on

receiving reliable results in research. The biology of various animals and the importance of anatomic variables for different kind of researches.

4. Major zoonosis from laboratory animals to humans

5. Description of different animal models

6. Imaging - techniques available at the HU (Lecturer: Dr. Rinat Abramovitch)

7. Practical training : various procedures (handling of animals, injections, bleeding, gavage – see detailed list).

Required Reading:
https://animals.ekmd.huji.ac.il/He/home/courses/Pages/learning_material.aspx

Additional Reading Material:

Course/Module evaluation:
End of year written/oral examination 50 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 50 %
Practical Lab

Additional information: