

# The Hebrew University of Jerusalem

Syllabus

# INTRODUCTION TO PARASITOLOGY - 71824

Last update 19-09-2022

HU Credits: 3

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Animal Sciences

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: Rehovot

Course/Module Coordinator: Prof Gad Baneth

Coordinator Email: Gad.Baneth@mail.huji.ac.il

Coordinator Office Hours: by appointment

Teaching Staff:

#### Prof Gad Baneth

# Course/Module description:

The course describes basic principles in parasitology

The lectures will be recorded. The recordings would be available to students after the end of the semester

#### Course/Module aims:

To provide the student with a basic understanding of parasitology

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

To understand basic terms and principles in parasitology including life cycles, groups of parasites and means of preventing parasitic diseases

# <u>Attendance requirements(%):</u>

100

Teaching arrangement and method of instruction: Frontal lectures with reference to the scientific literature for further enrichment

#### Course/Module Content:

- 1. Preface to parasitology
- 2. Basic terms in parasitology A

Medical and veterinary Importance of parasites, commensalism, mutualism, parasitism, ectoparasites and endoparasites, types of hosts and vectors, monoxenous and heteroxenous life cycles.

3. Basic terms in parasitology B

Introduction to protozoa, specific organelles, motility.

4. Protozoa

Reproduction mechanisms of protozoa, cysts and cyst formation.

5. Apicomplexa

Apicomplexan organelles, the basic aplicomplexan life cycle, coccidia and coccidiosis.

6. Apicomplexa: Sarcocystidae

Toxoplasma gondii, Neospora caninum

- 7. Apicomplexa: Cryptosporidium
- 8. Apicomplexa: Babesia and babesiosis

An introduction to ticks and transmission of tick-borne pathogens, babesiosis of

#### domestic animals

9. Apicomplexa: theileriosis

10. Apicomplexa: hepatozoonosis

Hepatozoon canis, Hepatozoon americanum

11. Malaria

12. Kinetoplasta: trypanosomiasis

13. Kinetoplasta: leishmaniasis

14. Flagellates

Giardia, Trichomonas, Amoeba

15. Introduction to helminthology and trematodes

16. Nematodes 1

Ascarids, Anisakis, Ancylostoma, Spirocerca lupi

17. Nematodes 2

Trichuris, Trichinella, Filaria

18. Cestodes 1

Dipylidium, Taenia

19. Cestodes 2

Echinococcus granulosus and E. multilocularis

20. Course summary

# Required Reading:

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# Additional Reading Material:

Georgi's Parasitology for Veterinarians. 11th edition 2020. Author: Bowman. Elsevier.

### 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 %

#### <u>Additional information:</u>

Teaching and the final examinations may change subject to the university's regulations and availability of frontal teaching and examinations on campus