



The Hebrew University of Jerusalem

Syllabus

INTRODUCTION TO PARASITOLOGY - 71824

Last update 03-03-2025

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Animal Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: 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

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

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

Attendance requirements(%):

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 apicomplexan 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.

Grading Scheme:

Written Exam % 100

Additional information:

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