

The Hebrew University of Jerusalem

Syllabus

POULTRY MEDICINE - 65738

Last update 28-02-2025

<u>HU Credits:</u> 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Veterinary Medicine

<u>Academic year:</u> 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Rehovot

Course/Module Coordinator: Dr. Avishai Lublin

Coordinator Email: avishailublin@yahoo.com

Coordinator Office Hours: By appointment

Teaching Staff:

Dr. Avishai Lublin, Dr. Inna Lysaynsky

Course/Module description:

Poultry products are a major source of animal proteins for the growing global human population. In Israel poultry consumption is one of the highest in the world and poultry production is a main agricultural industry. Good understanding of the veterinary and veterinary related aspects of poultry species is important for all Israeli veterinarians and not only for veterinarians who wish to pursue a career in poultry medicine. This course will provide a comprehensive overview of the important disease etiologies of poultry species and the prevention, diagnosis and control of poultry diseases. The course will provide a specific emphasis on the zoonotic and food safety aspects of poultry health and will address the emerging topic of animal welfare in poultry production.

Course/Module aims:

1. To learn basic knowledge in diagnosing poultry diseases, prevention, treatment and control - as a flock medicine.

2. To recognize the infectious diseases of poultry and their etiologies.

3. To analyze clinical conditions in the poultry pen: Contribution of the husbandry, and differential diagnosis.

4. To learn about the connections between poultry diseases and public health.

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

• Discuss the prevention means, diagnosis, and control of poultry diseases from a flock medicine perspective.

- Discuss the response of poultry species to infectious and non-infectious diseases.
- Review the infectious diseases of poultry.

• Provide the student with tools to analyze and respond to poultry disease situations.

• Provide the student with the required background and knowledge to be able to participate in public discussions and debates about poultry related issues.

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

50

Teaching arrangement and method of instruction: lectures with presentations

Course/Module Content:

The poultry industry in Israel An introduction to poultry medicine, a poultry veterinarian's approach to poultry diseases Viral diseases Avian Influenza, the outbreaks in Israel and the connection to global outbreaks, the risks to humans Newcastle and other paramyxoviruses Pneumovirus Infectious bronchitis Flaviviruses: Outbreaks of West Nile fever in Israel and the risks to humans Viral turkey meningoencephalitis **USUTU VIRUS** Reo virus and Tendon cross syndrome Adenoviruses Infectious Fabricius bursal disease Marek's disease Chicken infectious anemia Fowl pox Avian encephalomyelitis oif chickens Laryngotracheitis Bacterial and fungal diseases Respiratory bacteria: Pasteurella multocida, Riemerella anatipestifer, Ornithobacterium, Avibacterium Poultry bacteria and public health - food poisoning: Salmonella Campylobacter Clostridium Poultry bacteria and public health-respiratory and other diseases: Chlamydia psittaci and the risks to humans Avian tuberculosis Erysipelas Mycoplasma Pathogenic fungi, mycotoxins Parasitic diseases Coccidiosis Internal and external parasites Intoxications in birds Course summary, examples of questions in the final exam

<u>Required Reading:</u>

1. Diseases of Poultry, 14th edition. David E. Swayne (Editor-in-Chief), John Wiley &

Sons, Inc, 2020 (two volume set)

Additional Reading Material:

 Avian Diseases Manual, 7th Ed. 2013, American Association of Avian Pathologists, Editor M. Boulianne.
Isolation and Identification of Avian Pathogens, 5th edition. Louise Dufour-Zavala et al., eds. American Association of Avian Pathologists. AAAP 2008.
Avian Histopathology, 3rd Ed. 2008, Oscar J. Fletcher, Published by American association of avian pathologists.
Color Atlas of Diseases and Disorders of the Domestic Fowl and Turkey, 1991, C. J. Randall, Published by Iowa State University Press/Ames

6. Color Atlas of Avian histopathology, 1996, C. J. Randall, Published by Mosby-Wolfe.

<u>Grading Scheme:</u> Written Exam % 100

Additional information:

The final grade is the final test grade at the end of the semester. a multiple-choice test of 25 questions. A passing score is 60.