

The Hebrew University of Jerusalem

Syllabus

VETERINARY BACTERIOLOGY AND MYCOLOGY (A) - 65816

Last update 14-10-2018

HU Credits: 4

Degree/Cycle: 2nd degree (Master)

Responsible Department: Veterinary Medicine

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Dr. Elad Daniel

Coordinator Email: daniel.elad@gmail.com

Coordinator Office Hours: by appointment

Teaching Staff:

Prof Elad Daniel
Dr. SHLOMO BLUM
Dr. Daniel Barkan

Course/Module description:

Host parasite interaction including.

Virulence factors

Innate immunity

Predisposing factors

Veterinary Bacteriology: *E.coli*, *Salmonella*, *Yersinia*, *Proteus*, *Shigella*, other *Enterobacteriaceae* *Pasteurella*, *Mannheimia*, *Haemophilus/Histophilus* *Actinobacillus*, *Moraxella*, *Bordetella*, *Neisseria*, *Branhamella*, *Acinetobacter* *Actinomyces*, *Nocardia*, *Dermatophilus*, *Rhodococcus*, other *Actinomycetaceae*, *Pseudomonas*, *Francisella*, *Burkholderia*, *Arcanobacterium*, *Corynebacterium*, *Erysipelothrix*, *Fusobacterium*, *Dichelobacter*, *Prevotella*, *Porphyromonas*, *Staphylococcus*, *Streptococcus*, *Mycobacteriaceae*, *Mycobacterium tuberculosis* complex *Mycobacterium avium* subsp. *paratuberculosis*, *Listeria*, *Campylobacter*, *Bartonella*, *Taylorella*, *Chlamydia*, Q-Fever Mollicutes (*Mycoplasma*, *Acholeplasma*, *Ureaplasma*), *Leptospira*, *Brachyspira*, *Borrelia*, *Treponema*, *Helicobacter*.

Course/Module aims:

Knowledge of related bacteria and fungi that cause infections in animals from mammals in terms of their classification, their environment, violence and pathogenesis mechanisms. Epidemiology, clinic, treatment and laboratory tests will be brief reference.

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

To recognize pathogenic fungi and bacteria in animals
Describe violence mechanisms of bacteria
Recognize defense mechanisms of the hosts

Attendance requirements(%):

100

Teaching arrangement and method of instruction: lecture

Course/Module Content:

- 1.parasite-host relationship
 - a. Violent bacteria mechanisms : properties that allow them to fulfill their potential to cause disease.
 - b.Non-specific defense mechanisms of hosts who are responsible for preventing morbidity or dealing with it, if prevention fails.
 - c.Risk factors and their impact on the defense mechanisms of hosts
- 2.Bacterial pathogens of veterinary importance:
 - a. Review of various bacteria
 - b.All bacteria or group of bacteria will be reviewed at various aspects, but the emphasis will be on the pathogenesis, pathology, epidemiology and public health and less on laboratory and treatment.
 - c.The course will focus on Bacterial Pathogens of mammals.

Required Reading:
in class lectures

Additional Reading Material:
none

Course/Module evaluation:

End of year written/oral examination 80 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 20 %
Other 0 %

Additional information:

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