**Infectious Diseases (B) (MID. 522)**

**Overall aims of the Course:**

By successful completion of the course, the student should be able to:

1. Demonstrate a satisfactory level of knowledge of the epidemiology pathogenesis, field and laboratory diagnosis and differential diagnosis of infectious diseases affecting Equines and Pets.
2. Apply basic concepts and principles for surveying and combating infectious diseases affecting ruminants, clearly correlate, and analyze different strategies for prevention and control of Equines and Pets infectious diseases.
3. Apply proficiently the fundamentals and methodologies of scientific research and use their various tools in diagnosis and combating of infectious diseases affecting ruminants and related sciences such as epidemiology, bacteriology, mycology, virology, parasitology, immunology, pathology, pharmacology, molecular biology.
4. Use of the analytical thinking and its applications for diagnosis and combating infectious diseases affecting Equines and Pets.
5. Apply a professional skill in techniques used for design and statistical analysis of confirmatory and exploratory experiments using laboratory animals with ethical considerations.
6. Apply the specialized knowledge and combine it with relevant knowledge for diagnosis and combating infectious diseases problems affecting Equines and Pets as diarrhea, pneumonia, lameness, teat and udder disorders, skin affections, etc.
7. Show awareness of the current infectious diseases’ problems affecting Equines and Pets.
8. Identify problems in the field of combating infectious diseases affecting Equines and Pets and find solutions.
9. Master an appropriate range of professional skills and the use of appropriate technological means to serve diagnosis and combating of infectious diseases affecting ruminants.
10. Communicate effectively and lead teams.
11. Be decision-maker in different professional contexts.
12. Utilize the available resources to achieve the highest benefit and conserve them.
13. Show awareness of his role in community development and maintain the environment insights of global and regional changes.
14. Act reflecting a commitment to integrity and credibility and abide by the rules of the profession.
15. Develop himself academically and professionally and be capable of continuous learning.

**Course contents:**

* Viral diseases of Equines: E. Encephalomyelitis - Rabies - Borna Disease - West Nile Encephalomyelitis - Vesicular Stomatitis - Horse Pox - E. papillomatosis - Coital Exanthema - E. Viral Rhinopneumonitis - E. Viral Arteritis - E. Influenza - African Horse Sickness - E. Infectious Anemia.
* Bacterial and Fungal diseases of Equines: Tetanus - Strangles + P Haemorrhagica - Rhodococcus equi infection in foals - Shigellosis - Salmonellosis – Colibacillosis - Glanders - Ulcerative lymphangitis - Epizootic Lymphangitis – Sporotrichosis - Dermatophilosis - Dermatophytosis.
* Parasitic diseases of Equines: Habronemosis - Gasterophilosis - Trichostrongylosis – Parascarosis - Strongyloidosis – Strongylosis - Oxyurosis - Cestodiasis - Verminous Bronchitis - E. Babesiosis - Dourine.
* Viral diseases of Pets: F. Influenza - F. Leukemia - F. Infectious Peritonitis - F. Panleukopenia - F. Immunodeficiency Disease - Rabies - C. Distemper - C. Parvovirus Disease - C. Infectious Hepatitis - C. Coronavirus Disease - C. Papillomatosis.
* Bacterial and Fungal diseases of Pets: C. Brucellosis - Kennel Cough – Leptospirosis - Fading puppy and kitten syndrome - Dermatophytosis - Nasal Aspergillosis.
* Parasitic diseases of Pets: Ascariasis - Dipylidiosis - C. Babesiosis - C. Ehrlichiosis – Toxoplasmosis - Mange (Sarcoptic - Demodectic - Otodectic).
* Field Problems caused by infectious diseases of Equines.
* Field Problems caused by infectious diseases of Pets.
* Diagnosis of viral diseases of Equines and Pets.
* Diagnosis of bacterial diseases of Equines and Pets
* Diagnosis of fungal diseases of Equines and Pets.
* Diagnosis of parasitic diseases of Equines and Pets.
* Techniques used for diagnosis of viral diseases of Equines and Pets
* Techniques used for diagnosis of bacterial diseases of Equines and Pets
* Techniques used for diagnosis of parasitic diseases of Equines and Pets
* Drugs used for treatment of Equines and Pets infectious diseases
* Vaccination program against infectious disease of Equines and Pets.