

Curriculum

Dental medicine, 2nd year, 2nd semester

Lectures

14 weeks x 1 hour

1. General characteristics of viruses. Architecture of virions. The chemical composition of the viruses.
2. Replication of viruses. Viral genetics.
3. Viroids, prions. Bacteriophage.
4. Relations between virus and host cell. The pathology of viral infection.
5. DNA viruses Adenoviridae, Herpesviridae, Papillomaviridae.
6. RNA viruses: Orthomyxoviridae, Paramyxoviridae, Reoviridae
7. Human hepatitis viruses.
8. Human immunodeficiency virus (integrated course)
9. Classification of parasites. Protozoology.
10. Flat worms: Trematodes, tapeworms.
11. Cylindrical worms: nematodes. Entomology. Parasitic infections that affect the immune-deficient hosts. Tropical / import parasitic diseases.
12. Mycology: generalities.
13. Mycology: yeasts
14. Mycology: filamentous fungi (TBL)

Practical classes

14 weeks x 2 hours

1. Labor safety in the laboratory. Sterilization. The collection, transport and preservation of pathological products. The diagnostic scheme in viral diseases
2. Morphology and cultivation of viruses (cell cultures, inoculation of embryonated chicken egg, inoculation of laboratory animals).
3. Diagnostic techniques in microbiology: Microscopic examination, immunological reactions, Methods for nucleic acids detection
4. Laboratory diagnosis of oropharyngeal viral diseases. Herpetic gingivostomatitis - HSV I and II, VZV, EBV, CMV. Herpangina and hand-foot-mouth disease - Coxsackie. Oral manifestations in Morbillivirus infection. Laboratory diagnosis of infections caused by papillomaviruses.
5. Laboratory diagnosis of viral enteral diseases (rotavirus), respiratory diseases: Rhinovirus, Influenza virus and parainfluenza, respiratory syncytial virus, adenovirus.
6. Laboratory diagnosis of viral hepatitis

7. Laboratory Diagnosis of HIV /AIDS - HIV oral manifestations
8. Seminar
9. Diagnostic scheme of parasitological infections. Diagnostic methods used in parasitology laboratory. Nomenclature of parasites and parasitic diseases. Classification of parasites.
10. Phylum Protozoa, Class Rhizopoda: Entamoeba gingivalis, Entamoeba histolytica. Trichomonas Buccalis, Trichomonas vaginalis, Giardia lamblia, Toxoplasma gondii.
11. Phylum Helminthes - roundworms: Ascaris, Enterobius, Trichinella. Phylum Helminthes - tapeworms: Echinococcus granulosus, Taenia saginata and Taenia solium
12. Mycology: Laboratory diagnosis of infections caused by yeasts and filamentous fungi
13. Review. Recovery of missed classes.
14. Seminar

Bibliography

1. ROELME
2. <https://microbiologie.umftgm.ro>
3. Brooks G.F., Butel, J. S., Morse, S.A.: Jawetz, Melnick, Adelberg's Medical Microbiology, 23 rd edition. 2006
5. Koneman: Color Atlas and Textbook of Diagnostic Microbiology, Lippincott, 2006
6. Murray, P.R., Rosenthal, K.S., Kobayashi, G.S., Pfaller, M.A.: Medical Microbiology, Fourth Edition. Mosby 2002.
7. Samaranayake, L: Essential Microbiology for Dentistry. Churchill Livingstone, Elsevier, 2006
8. Marsh, P.D., Martin, M.V.: Oral Microbiology Fifth edition. Churchill Livingstone, Elsevier, 2009