

Textbook - Warren Levinson et al. Review of Medical Microbiology and Immunology. 15th edition

Faculty of Medicine
MODULE 16.
Thematic Plan of Lectures and Practical Classes

Study weeks	Lectures	Duration (hours)
1	Important Arboviruses that Cause Disease in the United States - Eastern Equine Encephalitis Virus, Western Equine Encephalitis Virus, St. Louis Encephalitis Virus, California Encephalitis Virus, Colorado Tick Fever Virus, West Nile Virus. Important Arboviruses that Primarily Cause Disease Outside the United States - Yellow Fever Virus, Dengue Virus, Chikungunya Virus, Zika Virus Minor Viral Pathogens - Crimean-Congo Hemorrhagic Virus, Hantaviruses, Human Herpesvirus 6, Japanese Encephalitis Virus, Lassa Fever Virus, Lymphocytic Choriomeningitis Virus, Marburg Virus.	1
2	Slow Diseases Caused by Conventional Viruses - Progressive Multifocal Leukoencephalopathy, Subacute Sclerosing Panencephalitis, Acquired Immunodeficiency Syndrome, Slow Diseases Caused by Prions - Kuru, Creutzfeldt-Jakob Disease Variant Creutzfeldt-Jakob Disease (vCJD) Slow Diseases of Animals - Scrapie, Visna, Bovine Spongiform Encephalopathy, Chronic Wasting Disease Tumor viruses. Malignant Transformation of Cells. Role of Tumor Viruses in Malignant Transformation. Proviruses & Oncogenes. Outcome of Tumor Virus Infection. Transmission of Tumor Viruses. Vaccines Against Cancer. Do Animal Tumor Viruses Cause Cancer in Humans?	1
3	Human immunodeficiency virus - Disease, Important Properties, Summary of, Replicative Cycle, Transmission & Epidemiology, Pathogenesis & Immunity, Clinical Findings, Laboratory Diagnosis, Treatment, Prevention.	1
4	Basic mycology. Cutaneous and subcutaneous mycoses.	1
5	Systemic mycoses. Opportunistic mycoses.	1
6	Intestinal and urogenital protozoa (Entamoeba, Giardia, Cryptosporidium, Trichomonas), Blood and Tissue protozoa. (Plasmodium, Toxoplasma).	1

N	Practical Classes (6 classes, each of 2h.)	Study Materials
1.	Important Arboviruses that Cause Disease in the United States - Eastern Equine Encephalitis Virus, Western Equine Encephalitis	Chapter 42; Chapter 46 -

	Virus, St. Louis Encephalitis Virus. California Encephalitis Virus, Colorado Tick Fever Virus, West Nile Virus. Important Arboviruses that Primarily Cause Disease Outside the United States - Yellow Fever Virus, Dengue Virus, Chikungunya Virus, Zika Virus Minor Viral Pathogens - Crimean-Congo Haemorrhagic Virus, Hantaviruses, Human Herpesvirus 6, Japanese Encephalitis Virus, Lassa Fever Virus, Lymphocytic Choriomeningitis Virus, Marburg Virus. <u>Clinical case discussion</u>	according to study topics
2.	Slow Diseases Caused by Conventional Viruses - Progressive Multifocal Leukoencephalopathy, Subacute Sclerosing Panencephalitis, Acquired Immunodeficiency Syndrome, Slow Diseases Caused by Prions - Kuru, Creutzfeldt-Jakob Disease, Variant Creutzfeldt-Jakob Disease (vCJD); Slow Diseases of Animals - Scrapie, Visna, Bovine Spongiform Encephalopathy, Chronic Wasting Disease - Disease, Important Properties, Summary of, Replicative Cycle, Transmission & Epidemiology, Pathogenesis & Immunity, Clinical Findings, Laboratory Diagnosis, Treatment, Prevention. Tumor viruses. Malignant Transformation of Cells. Role of Tumor Viruses in Malignant Transformation. Proviruses & Oncogenes. Outcome of Tumor Virus Infection. Transmission of Tumor Viruses. Vaccines Against Cancer. Do Animal Tumor Viruses Cause Cancer in Humans? <u>Clinical case discussion</u>	Chapter 44; Chapter 43 - according to study topics
3.	Human immunodeficiency virus - Disease, Important Properties, Summary of, Replicative Cycle, Transmission & Epidemiology, Pathogenesis & Immunity, Clinical Findings, Laboratory Diagnosis, Treatment, Prevention. <u>Clinical case discussion</u>	Chapter 45
4.	Basic mycology - Morphology, pathogenesis, toxins and allergic reactions, antifungal diagnostics and their mode of action. Cutaneous and subcutaneous mycoses (Dermatophytoses, Tinea Versicolor, Tinea Nigra, Sporotrichosis, Chromomycosis, Mycetoma). <u>Laboratory session - morphology, cultivation, and staining of fungi;</u> <u>Clinical case discussion</u>	Chapter 47 Chapter 48; handout for laboratory session
5.	Systemic mycoses (<i>Coccidioides</i>, <i>Histoplasma</i>, <i>Blastomyces</i>, <i>Paracoccidioides</i>). Opportunistic mycoses (<i>Candida</i>, <i>Cryptococcus</i>, <i>Aspergillus</i>, <i>Mucor</i> & <i>Rhizopus</i>, <i>Pneumocystis</i>) <u>Clinical case discussion</u>	Chapter 49; Chapter 50
6.	Intestinal and urogenital protozoa (<i>Entamoeba</i>, <i>Giardia</i>, <i>Cryptosporidium</i>, <i>Trichomonas</i>), Blood and Tissue protozoa. (<i>Plasmodium</i>, <i>Toxoplasma</i>). <u>Clinical case discussion</u>	Chapter 51; Chapter 52 - according to study topics