

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

Faculty of Medicine

MODULE 15.

Thematic Plan of Lectures and Practical Classes

N	Lectures	hours
1.	Basic virology - structure, replication of viruses, genetics & gene therapy, pathogenesis, host defences, laboratory diagnosis, antiviral drugs, viral vaccines.	1
2.	HERPESVIRUSES - Overview Herpes Simplex Viruses, Varicella-Zoster Virus, Cytomegalovirus.	1
3.	Epstein–Barr Virus (EBV), Human Herpesvirus 8 (Kaposi’s Sarcoma–Associated Herpesvirus).	1
4.	POXVIRUSES - Smallpox Virus, Molluscum Contagiosum Virus; HUMAN PAPILLOMAVIRUS.	1
5.	Respiratory Viruses - Influenza Virus, Parainfluenza Virus, Respiratory Syncytial Virus, Human Metapneumovirus, Coronavirus, Rhinovirus, Adenovirus.	1
6.	Important Childhood Viruses & Viruses with an Animal Reservoir. IMPORTANT CHILDHOOD VIRUSES - Measles Virus, Mumps Virus, Rubella Virus, Parvovirus B19; VIRUSES WITH AN ANIMAL RESERVOIR - Rabies Virus, Ebola Virus	1
7.	Viruses That Infect the Enteric Tract. Norovirus Rotavirus Poliovirus Coxsackie Virus Echovirus Other Enteroviruses.	1
8.	Hepatitis viruses. Hepatitis A Virus, Hepatitis B Virus, Non-A, Non-B Hepatitis Viruses, Hepatitis C Virus, Hepatitis D Virus (Delta Virus), Hepatitis E Virus, Hepatitis G Virus	1

N	Content of practical classes and seminars (15 classes, each of 2h.)	Study Materials
1.	Overview of medically important viruses.	Chapter 31
2.	Basic virology - structure, replication of viruses, genetics & gene therapy, pathogenesis, host defences, laboratory diagnosis, antiviral drugs, viral vaccines. <u>Laboratory session – viral cytopathic effects on the phage model.</u> <u>Phage susceptibility.</u>	Chapters 28-36 (“pearls”); Handout for laboratory session
3.	HERPESVIRUSES - Overview Herpes Simplex Viruses, Varicella-Zoster Virus, Cytomegalovirus – diseases, important properties, replicative cycle, transmission and epidemiology,	Chapter 37

	pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	
4.	Epstein–Barr Virus (EBV), Human Herpesvirus 8 (Kaposi’s Sarcoma–Associated Herpesvirus); POXVIRUSES - Smallpox Virus, Molluscum Contagiosum Virus; HUMAN PAPILLOMAVIRUS – diseases, important properties, replicative cycle, transmission and epidemiology, pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	Chapter 37
5.	Respiratory Viruses - Influenza Virus, Parainfluenza Virus, Respiratory Syncytial Virus, Human Metapneumovirus, Coronavirus, Rhinovirus, Adenovirus– diseases, important properties, replicative cycle, transmission and epidemiology, pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	Chapter 38
6.	Important Childhood Viruses & Viruses with an Animal Reservoir. IMPORTANT CHILDHOOD VIRUSES - Measles Virus, Mumps Virus, Rubella Virus, Parvovirus B19; VIRUSES WITH AN ANIMAL RESERVOIR - Rabies Virus, Ebola Virus – diseases, important properties, replicative cycle, transmission and epidemiology, pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	Chapter 39
7.	Viruses That Infect the Enteric Tract. Norovirus Rotavirus Poliovirus Coxsackie Virus Echovirus Other Enteroviruses – diseases, important properties, replicative cycle, transmission and epidemiology, pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	Chapters 40
8.	Hepatitis viruses. Hepatitis A Virus, Hepatitis B Virus, Non-A, Non-B Hepatitis Viruses, Hepatitis C Virus, Hepatitis D Virus (Delta Virus), Hepatitis E Virus, Hepatitis G Virus – diseases, important properties, replicative cycle, transmission and epidemiology, pathogenesis and immunity, clinical findings, laboratory diagnosis, treatment and prevention. <u>Clinical case discussion</u>	Chapter 41