INTERNATIONAL HIGHER SCHOOL OF MEDICINE

Infectious Diseases Department

SYLLABUS
Infant Infectious Disease

2025-2026 academic year
for students of medical faculty
5th course IX semester,
groups 1-48
4 credits (120h, Auditorial classes -72h, independent work – 48h)

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Venue: Republic Clinical Infectious Diseases Hospital, 70 L. Tolstoy str.
Infectious Diseases Department of IHSM

The Syllabus
is considered at the meeting
of the Infectious Diseases Department
Protocol № _2_ dated 29.08.2025 year
Head of the department prof. Kutmanova A.Z.

Course Objective: the course of Infant infectious diseases is necessary for the clinical diagnosis of the most common infectious diseases and quarantine infections in children. It also focuses on the rational use of laboratory and instrumental methods for examining sick children, and the ability to prescribe appropriate etiotropic and pathogenetic treatment, including elements of emergency therapy.

After study of the discipline the student must:
Knowledge:

1. Properties of the pathogen, epidemiology of most common infant infectious diseases
2. Pathogenesis, classification of clinical forms, features of leading symptoms, clinical manifestation and complications in the different age groups
3. Symptoms and mechanisms of development of emergency conditions in infant infectious diseases and methods of their correction
4. Laboratory and instrumental methods of diagnosis, differential diagnosis.
5. Main principles of treatment in outpatient and hospital care

Skill:

1. collect information about the epidemiology of an infant infectious diseases and methods of specific and non-specific prevention of infant infections
2. correctly collect complains and anamnesis
3. conduct syndromic clinical diagnostics in infant infectious diseases
4. be able to conduct differential diagnostics
5. be able to prescribe the correct diagnostic procedures, laboratory and instrumental research methods with subsequent interpretation and treatment plan based on the etiology and pathogenesis of a given infant infection

Attitude:

1. Examination of a child in the different age with infant infectious diseases, including acute intestinal infections, viral hepatitis, droplet infections and exanthemas.
2. Have the technique of collecting various biological materials (stool sample, taking a smear from the throat: swab test, collecting cerebrospinal fluid)
3. Be able to diagnose emergency symptoms that may develop with some infant infectious diseases (dehydration, croup, neurotoxicosis, infectious toxic shock) and methods of the correction

Pre-requisites:

• Anatomy (macro-microanatomy)
• Normal physiology
• General pathology
• Microbiology, virology, and immunology
• Propediatrics
• Childhood diseases
• Pediatric surgery

Post-requisites:

• Polyclinic pediatrics
• Family medicine

THEMATIC PLAN OF LECTURES

№	Theme of lecture	Hours	Dates
1.	Bacterial and viral Intestinal infections	2	25.08.-31.05.
2.	Viral hepatitis in children	2	25.08.-31.05.
3.	ARVI	2	25.08.-31.05.
4.	Measles. Rubella.	2	25.08.-31.05.
5.	Mumps. Pertussis	2	25.08.-31.05.
6.	Diphtheria. Scarlet fever.	2	25.08.-31.05.
7.	HSV 1,2, VZV	2	25.08.-31.05.
8.	CMV, EBV	2	25.08.-31.05.
	Total	**16**	

THEMATIC PLAN OF PRACTICAL CLASSES

№	Theme of practical class	Hours	Dates
	Unit 1. Acute Intestinal Infections:		
1.	Food poisoning. Salmonellosis.	2	25.08.-31.05.
2.	Dysentery (Shigellosis). E. Coli(EHEC, EPEC, ETEC, EIEC, EAEC).	2	25.08.-31.05.
3.	Viral Diarrheas (Rotavirus, Norovirus, Enterovirus, Polio, Adenovirus).	2	25.08.-31.05.
4.	Opportunistic infections in GIT.	2	25.08.-31.05.
5.	Complications of acute intestinal infections. Dehydration in Children.	2	25.08.-31.05.
6.	**Module 1.**	2	25.08.-31.05.
	Unit 2. Viral Hepatitis in Children:		
7.	Water borne jaundice caused by viral agents in children (viral hepatitis A, E.).	2	25.08.-31.05.
8.	Viral hepatitis B, D, C.	4	25.08.-31.05.
9.	Differential diagnosis of jaundice in children.	2	25.08.-31.05.
10	**Module 2.**	2	25.08.-31.05.
	Unit 3. Droplet infections :		
	Acute Respiratory Viral Infections (ARVI)		
11.	Influenza.	2	25.08.-31.05.
12.	Parainfluenza. Acute laryngo-tracheitis in children. Acute respiratory distress syndrome.	2	25.08.-31.05.
13.	Adenovirus infection, Rhinovirus infection, RSV-infection	2	25.08.-31.05.
14	Measles. Rubella.	2	25.08.-31.05.
15	Mumps.	2	25.08.-31.05.
16	Neurotoxicosis in children.	2	25.08.-31.05.
	Acute Respiratory Bacterial Infections (ARBI)		
17	Pertussis	2	25.08.-31.05.
18	Diphtheria.	2	25.08.-31.05.
19	Streptococcal infection in children (Scarlet fever).	2	25.08.-31.05.
20	Meningococcal infections.	4	25.08.-31.05.
21	**Module 3.**	2	25.08.-31.05.
	Unit 4. Herpetic infections:		
22.	HSV 1,2, VZV(Chickenpox).	4	25.08.-31.05.
23.	CMV, Roseola in children (herpesvirus 6 types).	2	25.08.-31.05.
24.	EBV.	2	25.08.-31.05.
25	**Module 4.**	2	25.08.-31.05.
	Total	**56**	

THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

Unit №	Theme of independent work	Hours	Dates
1.Acute intestinal infections in children	1. Describe the mechanisms of development HUS in children with STPEC, Shigella. Analyze the pathogenesis, diagnosis, treatment, prevention of HUS. 2. Viral diarrhea. Describe the viruses that can lead to gastroenteritis. Explain epidemiology and pathogenesis of viral diarrhea. Describe the methods of diagnosis in viral infections in GIT. 3. Write the methods of lab diagnostics in AII (stool test, stool culture, serological investigation) 4. Describe the possible opportunistic bacteria, fungi in GIT which can lead to clinical manifestation, write the epidemiological predictors, clinical picture, methods of diagnostics and treatment. 5. Dehydration in children. causes, mechanism of development, degree of dehydration, principles of diagnosis and treatment. 6. Dysbiosis in children. causes, diagnosis, correction methods.	14	

	7. Enumerate different causative agents and the types of Healthcare-Associated Infections (HAI). Define HAI and describe the chain of transmission and its role in preventing HAI. 8. Polio - epidemiology, pathogenesis, clinical features, diagnosis, treatment, prevention.		
2.Viral hepatitis in children.	1. Differential diagnosis of jaundice in children. 2. Diagnostics, treatment, prevention of VH in children. 3. Explain the components of the Universal Immunization Program and the National Immunization Program 4. Choose and interpret appropriate diagnostic tests including: CBC, bilirubin, liver function tests, Hepatitis serology and ascitic fluid examination in patient with liver diseases	10	
3. Droplet infections in children	1. Acute respiratory viral infections in children. 2. Methods of specific and non-specific prevention of acute respiratory viral infections in children. 3. Toxic and secondary bacterial complications of acute respiratory viral infections in children, development mechanisms, diagnosis, treatment. 4. Laboratory diagnosis of ARVI. 5. Treatment of ARVI 6. Differential diagnosis of ARVI. 7. Streptococcal infection in children: scarlet fever, complications. 8. Differential diagnosis of tonsillitis (bacterial, viral) 9. Classification of exanthems, characteristics of rashes with infectious exanthemas. 10. Measles. complications, prevention. 11. Congenital and acquired rubella - complications, diagnosis, prevention. 12. Parvovirus infection (B19). 13. Diphtheria. Clinical features. Differential diagnostics. Complications - development mechanism, clinical features. Prevention. 14. Pertussis. Clinical features. Differential diagnostics. Complications - development mechanism, clinical features. Prevention. 15. Mumps. Clinical features. Differential diagnostics. Complications - development mechanism, clinical features. Prevention. 16. Meningitis in children. differential diagnosis of viral, bacterial, fungal meningitis. Interpretation of CSF. 17. Enumerate the microbial agents causing meningitis. Explain the pathogenesis, clinical course and laboratory diagnosis of meningitis caused by bacterial, fungal, viral and parasitic agents.	12	
4. Herpetic infections in children	1. Herpetic infection in children HSV 1,2. Clinical features, diagnosis, complications, treatment. 2. VZV. Clinical features, diagnosis, complications, treatment. 3. CMV in children. Congenital CMV infection. 4. Roseola infantum (HHV-6) Infectious mononucleosis (EBV). Clinical features. Differential diagnostics. Complications - development mechanism, clinical features. Prevention.	12	
	Total	**48**	

Recommended reading for the discipline:
Basic:

1. E. Nelson, textbook of Pediatrics, 2 volume set, 2024 8th edition, https://t.me/+VkCtka825jT15329
2. Pervez Akbar Khan MBBS, FCPS Formerly, Professor of Pediatrics Nishtar Medical College Multa 10th edition (IHSM library)
3. Ghai, essential pediatrics, 2019, 9th edition
4. Harrison's, Dennis L. Kasper, Anthony S. Fauci; Infectious Diseases; McGraw Hill; 2014.
5. Jonathan Cohen, Steven M. Opal, William G. Powderly, Infectious Diseases, 2017. https://t.me/+VkCtka825jT15329
6. Elaine C. Jong and Dennis L. Stevens, Netter's infectious diseases, 2012. https://t.me/+VkCtka825jT15329

Online sourses:

1. WHO guidelines (https://www.who.int/news-room/fact-sheets/detail/e-coli)
2. CDC guidelines (https://www.cdc.gov/infection-control/hcp/healthcare-personnel-epidemiology-control/pertussis.html)
3. National library of Medicine (https://www.ncbi.nlm.nih.gov/books/NBK519008/)

Grading policy and procedures for all types of work:
For the period of studying the discipline, the student gains points for the relevant parameters (per unit):
current score - 40 points
independent work - 20 points
control score (final assessment of knowledge per unit) - 40 points
Maximum score - 100 (40+20+40)

Grading system for student's achievements

Grading criteria per discipline				
Maximum score	Intervals			
	«unsatisfactory»	«satisfactory»	«good»	«excellent»
Current control - 40	0-23	24-30	31-35	36-40
Interval description	Does not perform the task, does not know and does not understand the lecture material of the lesson, which prevents further assimilation of the program; cannot apply the acquired knowledge to solving situational tasks, test questions. Does not answer the questions of the teacher During the examination of the patient does not have practical skills	Does not complete the task in full, has gaps in the assimilation of lecture material, has difficulties in applying knowledge to solve situational problems, test questions; does not fully and accurately answer the teacher's questions. When examining a patient, he has little practical skills	Performs the task in full, knows the lecture material, but sometimes makes mistakes when solving situational tasks and test questions, understands the main content of the lecture material, gives correct answers to the teacher's questions. During the examination of the patient, he partially	Performs the task in full, easily applies knowledge and skills in solving situational tasks and test questions, rarely makes mistakes, gives complete and correct answers to the teacher's questions. When examining a patient, he fully possesses practical skills

			possesses practical skills	
Independent work - 20	0-11	12-15	16-17	18-20
Interval description	Presentation, report, table, situational task are missing	The content of the presentation, report, tables partially correspond to the given topic, the sequence of presentation of theoretical questions is broken: etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention. Situational tasks contain little description of the clinical case	The content of the presentation, report, tables do not fully correspond to the given topic, the sequence of presentation of theoretical issues (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention) is not fully preserved. Situational tasks do not fully contain a description of a clinical case	The content of the presentation, report, tables correspond to the given topic, the sequence of presentation of theoretical questions (etiology, pathogenesis, epidemiology, clinic, differential diagnosis, laboratory diagnostics, treatment and prevention) is completely preserved. Situational tasks contain a description of the entire clinical case
Control work (module) - 40	0-23	24-30	31-35	36-40
Interval description	Does not know the answers to test questions and situational tasks	Poorly knows the answers to test questions and situational tasks	Knows the answers to test questions and situational tasks well	Perfectly knows the answers to test questions and situational tasks

Conduct Policy: (lateness, absence, behavior in the auditorium, late submission of work)-
- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-10 points.

Academic Ethics Policy:
- Be tolerant, respect the opinions of others.
- Formulate objections in the correct form.
- Constructively support feedback in all classes.

- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.
For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-10 points.

Guidelines for the classes of the discipline

Unit №1. Acute intestinal infections.
Class 1. Lecture 1. Bacterial and viral Intestinal infections. (2hrs)
Key questions covered in Lecture 1:
-Etiology and basis of water borne diarrheal diseases.
-Epidemiology, morphology, pathogenesis, clinical features and diagnostic modalities of bacterial agents causing acute diarrhea.
- Laboratory methods used to detect causative agents of intestinal infections.
- Viral Intestinal Infections: epidemiology, morphology, pathogenesis, clinical features and diagnostic modalities of viral agents causing dysentery.

Class 2. Practical class 1. Food poisoning. Salmonellosis. (2hrs)
Key questions covered in Practical class 1:
-Definition of diarrhea (acute diarrhea, chronic diarrhea, persistent diarrhea). Etiology, risk factors, clinical features, complications of acute diarrheal diseases ant it pathogens.
-Differential diagnosis of diarrhea, salmonellosis and food poisoning.
Recommended reading for the class:
[1] pp. 970–973
[2] pp. 251–257
[3] pp. 276 - 278

Class 3. Practical class 2. Dysentery (Shigellosis). E. Coli (EHEC, EPEC, ETEC, EIEC, EAEC). (2hrs)
Key questions covered in Practical class 2:
-Distinguishes between diarrhea and dysentery based on clinical features.
-Clinical presentation and management of dysentery in children.
-Clinical presentation and management of Escherichiosis in children
Recommended reading for the class:
[1] pp. 763–798
[2] pp. 371–427

Class 4. Practical class 3. Viral Diarrheas (Rotavirus, Norovirus, Enterovirus, Polio, Adenovirus). (2hrs)
Key questions covered in Practical class 3:
-Discussion of the viral agents of acute intestinal infections and their pathogenesis, clinical course and laboratory diagnosis.
Recommended reading for the class:
[1] pp. 970–973
[2] pp. 251–257

Class 5. Practical class 4. Opportunistic infections in GIT. (Proteus mirabilis, Bacillus cereus, Clostridium difficile, Staph. aureus, fungi). (2hrs)
Key questions covered in Practical class 4:
-Etiopathogenesis and laboratory diagnosis of opportunistic infections (OI) of GIT along with factors predisposing to the development of OI by bacterial, viral, fungal agents.
Recommended reading for the class:
[1] pp. 763–798
[2] pp. 371–427

Class 6. Practical class 5. Complications of AII. Dehydration in Children. Treatment of AII. (2hrs)
Key questions covered in Practical class 5:
-Discussion of the acute systemic consequences of diarrhea including its impact on fluid balance.

-Signs of dehydration by WHO. Treatment plans (A, B, C). Discussion of the physiological basis of ORS, types of ORS and the composition of various types of ORS. Discussion of composition of fluids used in management of diarrhea, the role of antibiotics.
-The concept and application of the antimicrobial stewardship program including rational antimicrobial prescription and role in its implementation.
Recommended reading for the class:
[1] pp. 763–798
[2] pp. 371–427

Class 7. Practical class 6. (2hrs)
Module 1.
Key questions covered in Module 1:
-Solving MSQ (40)
-Solving clinical cases (10)
-Vivo session
-Essay on given topics:

1. Role and etiopathogenesis of invasive and toxigenic agents causing diarrhea.
2. Pathogenesis and clinical features of an infectious gastritis, enteritis, colitis syndromes.
3. Salmonellosis in children.
4. Shigellosis in children.
5. Escherichiosis in children.
6. The etiologic structure of acute intestinal infections caused by opportunistic enterobacteria (Proteus mirabilis, Bacillus cereus, Klebsiella, Clostridium difficile, Pseudomonas aeruginosa, Staphylococcus aureus, etc.). Clinical forms, complications, diagnostics, treatment.
7. Intestinal dysbiosis, causes of the condition, diagnostics, treatment.
8. Characteristic of agents and clinical features of viral diarrheas in children (Rotavirus infection, Norovirus infection, Adenovirus infection, Enterovirus infection, Poliovirus infection)
9. Enterovirus infection. Etiology: structure and characteristic of viruses, clinical forms, diagnostics, treatment.
10. Laboratory diagnostics, treatment, indications for hospitalization, principles of antibacterial therapy of acute intestinal infections.
11. Features of nosocomial GIT infections of different agents.
12. Clinical manifestation and treatment of toxicosis.
13. Stages of dehydration, clinical and lab diagnostics, principles of treatment.
14. Methods of rehydration (plan A, B, C).

Unit №2. Viral Hepatitis in Children.
Class 8. Lecture 2. Viral hepatitis in children (2hrs)
Key questions covered in Lecture 2:
-Etiology and basis of water borne jaundice, caused by viral agents
- Etiology and basis of parenteral viral hepatitis in children
-Epidemiology, etiopathogenesis, clinical features and complications of viral hepatitis in children.

Class 9. Practical class 7. Water borne jaundice caused by viral agents in children (viral hepatitis A, E.) (2hrs)
Key questions covered in Practical class 7:
-Etiopathogenesis, clinical features, complications, lab diagnostics and management of water borne jaundice in children (HAV, HEV).
Recommended reading for the class:
[1] pp. 1733–1751; 1771
[2] pp. 253–255; 312–404

Class 10. Practical class 8. Parenteral viral hepatitis B, D, C in children. (4hrs)
Key questions covered in Practical class 8:
-Etiopathogenesis, clinical features, complications, lab diagnostics and management of parenteral hepatitis in children.
Recommended reading for the class:
[1]pp. 1393-1404
[2]pp. 253–255; 312–404

Class 11. Practical class 9. Differential diagnosis of jaundice in children. Treatment of VH. (2hrs)
Key questions covered in Practical class 9:

- Differential diagnosis and prioritize based on clinical features, specific etiology for the presenting symptom in patient with liver disease (viral hepatitis).
-Physiologic and biochemical basis of hyperbilirubinemia.
-Etiopathogenesis, clinical features and management of acute hepatitis in children.
-Physiologic and biochemical basis of hyperbilirubinemia
-Discussion of the most appropriate laboratory test based on history and clinical presentation in a suspected case of viral hepatitis and interpretation of the type and progress of viral hepatitis based on the laboratory report of viral markers in a case of infection by hepatitis virus.
Recommended reading for the class:
[1]pp. 1120–1130
[2]pp. 3–12

Class 12. Practical class 10. (2hrs)
Module 2.
Key questions covered in Module 2:
-Solving MSQ (40)
-Solving clinical cases (10)
-Vivo session
-Essay on given topics:

1. Classification and pathogenesis of jaundice.
2. Classification of viral hepatitis at children.
3. Etiopathogenesis, clinical features, complications, lab diagnostics and management of water borne jaundice in children (HAV, HEV).
4. Etiopathogenesis, clinical features, viral markers, complications and management of parenteral hepatitis in children (HBV, HDV, HCV).
5. Differential diagnosis of VH.
6. Treatment and prevention of VH.

Unit №3. Droplet infections.
Class 13. Lecture 3. ARVI (acute respiratory viral infections). (2hrs)
Key questions covered in Lecture 3:
-Etiopathogenesis, laboratory diagnosis and prevention of infections of the upper and lower respiratory tract caused by viral agents (Influenza, Parainfluenza, Rhinovirus, Adenovirus, RSV).

Class 14. Practical class 11. Influenza. (2hrs)
Key questions covered in Practical class 11:
-The incubation period, clinical features of Influenza in children, complications of influenza in children.
-Laboratory diagnostics, treatment and prophylaxis.
Recommended reading for the class:
[1] pp. 1120–1130
[2] pp. 3–12

Class 15. Practical class 12. Parainfluenza. Acute stenotic laryngo-tracheitis in children. Acute respiratory distress syndrome. (2hrs)
Key questions covered in Practical class 12:
-The incubation period, clinical features of Parainfluenza in children, complications of Parainfluenza in children (ASLT- croup syndrome).
-Laboratory diagnosis, treatment.
Recommended reading for the class:
[1]pp. 1121–1125
[2]pp. 3–12

Class 16. Practical class 13. Adenovirus infection, Rhinovirus, RSV (2hrs)
Key questions covered in Practical class 13:
-The incubation period, clinical features, complications of Adenovirus infection, Rhinovirus, RSV in children
-Laboratory diagnostics, treatment and prophylaxis.
-Etiopathogenesis, laboratory diagnosis and prevention of Infections of the lower respiratory tract caused by viral agents.
-Etiopathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema.
-Etiopathogenesis and management of respiratory distress in children.
-Etiology, clinical features and management of Stridor in children.

Recommended reading for the class:
[1]pp. 1131-1133
[2]pp. 130; 185; 347

Class 17. Lecture 4. Measles. Rubella. (2hrs)
Key questions covered in Lecture 4:
-Etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses (Measles and Rubella)

Class 18. Practical class 14. Measles. Rubella. (2hrs)
Key questions covered in Practical class 14:
-Etiology, microbiology, pathogenesis and clinical presentations and diagnostic features of common viral infections of the skin in children.
-Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Rubella.
Recommended reading for the class:
[1]pp. 1069-1078;
[1]pp. 148–150;

Class 19. Lecture 5. Mumps. Pertussis. (2hrs)
Key questions covered in Lecture 5:
-Causes of fever and etiopathogenesis, clinical features, complications and management of child with Mumps, Pertussis.

Class 20. Practical class 15. Mumps. Pertussis. (2hrs)
Key questions covered in Practical class 15:
- Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with Mumps.
Recommended reading for the class:
[1]pp. 1078–1081
[2]pp. 255–379

Class 21. Practical class 16. Neurotoxicosis in children. (2hrs)
Key questions covered in Practical class 16:
-The common causes of fever and etiopathogenesis, clinical features, complications and management of fever in children.
-Etiopathogenesis, clinical features, complications and management of Febrile seizures in children.

Class 22. Practical class 17. Pertussis. (2hrs)
Key questions covered in Practical class 17:
- Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Pertussis.
- Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI pneumonia and empyema.
Recommended reading for the class:
[1]pp. 1078–1081
[2]pp. 255–379

Class 23. Lecture 6. Diphtheria. Scarlet fever. (2hrs)
Key questions covered in Lecture 6:
- Causes of fever and the etiopathogenesis, clinical features, complications and management of child with Diphtheria.
- Causes of fever and the etiopathogenesis, clinical features, complications and management of child with Scarlet fever.

Class 24. Practical class 18. Diphtheria. (2hrs)
Key questions covered in Practical class 18:
- The common causes of fever and the etiopathogenesis, clinical features, complications and management of child with Diphtheria.
Recommended reading for the class:
[1] pp. 929
[2] pp. 164–171; 239–243

Class 25. Practical class 19. **Streptococcal infection in children (Scarlet fever). (2hrs)**

Key questions covered in Practical class 19:
- The common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Scarlet fever.
- Differential diagnosis of acute tonsillitis in children.
- Differentiate between infective and non-infective lesions in the skin. Enlist microbes causing systemic disease with involvement of skin.
-Describe the etiopathogenesis, clinical approach and management of Toxic Shock Syndrome in children.
Recommended reading for the class:
1] pp. 173–175;
[2] pp. 253–255;

Class 26. Practical class 20. **Meningococcal infection in children. (4hrs)**
Key questions covered in Practical class 20:
- The incubation period, classification, clinical stages, complications of meningococcal infection.
-Etiopathogenesis, clinical features, complications, management, and prevention of acute bacterial Meningitis in children.
- Enumerate the microbial agents causing meningitis. Explain the pathogenesis, clinical course and laboratory diagnosis of meningitis caused by bacterial, fungal, viral and parasitic agents.
- Describe and discuss the common causes, clinical features and management of encephalitis and meningitis.
- Interpret and explain the findings in a CSF analysis in different types of meningitis.
Recommended reading for the class:
[1] pp. 927–931
[2] pp. 164–171; 239–243

Class 27. Practical class 21. **(2hrs)**
Module 3
Key questions covered in Module 3:
-Solving MSQ (40)
-Solving clinical cases (10)
-Vivo session
-Essay on given topics:
-Classification of ARVI
- Etiopathogenesis, laboratory diagnosis and prevention of infections of the upper and lower respiratory tract caused by viral agents (Influenza, Parainfluenza, Rhinovirus, Adenovirus, RSV).
-The incubation period, clinical features of Influenza in children, complications of influenza in children, laboratory diagnostics, treatment and prophylaxis.
-The incubation period, clinical features of Parainfluenza in children, complications of Parainfluenza in children (ASLT- croup syndrome), laboratory diagnosis, treatment.
-The incubation period, clinical features, complications of Adenovirus infection, Rhinovirus, RSV in children
-Laboratory diagnostics, treatment and prophylaxis.
-Etiopathogenesis, laboratory diagnosis and prevention of Infections of the lower respiratory tract caused by viral agents.
-Etiopathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI Pneumonia and empyema.
-Etiopathogenesis and management of respiratory distress in children.
-Etiology, clinical features and management of Stridor in children.
-Etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses (Measles and Rubella)
-Etiology, microbiology, pathogenesis and clinical presentations and diagnostic features of common viral infections of the skin in children.
-Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with exanthematous illnesses like Measles, Rubella.
- Enumerate the common causes of fever and describe the etiopathogenesis, clinical features, complications and management of child with Mumps.
-The common causes of fever and etiopathogenesis, clinical features, complications and management of fever in children.
-Etiopathogenesis, clinical features, complications and management of Febrile seizures in children.
- Enumerate the common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Pertussis.
- Describe the etiopathogenesis, diagnosis, clinical features, management and prevention of lower respiratory infections including bronchiolitis, wheeze associated LRTI pneumonia and empyema.
- Causes of fever and the etiopathogenesis, clinical features, complications and management of child with Diphtheria.

- Causes of fever and the etiopathogenesis, clinical features, complications and management of child with Scarlet fever.
- The common causes of fever and the etiopathogenesis, clinical features, complications and management of child with Diphtheria.
- The common causes of fever and discuss the etiopathogenesis, clinical features, complications and management of child with Scarlet fever.
- Differential diagnosis of acute tonsillitis in children.
- Differentiate between infective and non-infective lesions in the skin. Enlist microbes causing systemic disease with involvement of skin.
-Describe the etiopathogenesis, clinical approach and management of Toxic Shock Syndrome in children.
- The incubation period, classification, clinical stages, complications of meningococcal infection.
-Etiopathogenesis, clinical features, complications, management, and prevention of acute bacterial Meningitis in children.
- Enumerate the microbial agents causing meningitis. Explain the pathogenesis, clinical course and laboratory diagnosis of meningitis caused by bacterial, fungal, viral and parasitic agents.
- Describe and discuss the common causes, clinical features and management of encephalitis and meningitis.
- Interpret and explain the findings in a CSF analysis in different types of meningitis.

Unit 4. Herpetic Infections in Children
Class 28. Lecture 7. HSV 1,2, VZV. (2hrs)
Key questions covered in Lecture 7:
-Etiopathogenesis, clinical features, complications and management of Herpes Simplex Virus Infections and Varicella Zoster infections.

Class 29. Practical class 22. HSV 1,2, VZV. (4hrs)
Key questions covered in Practical class 22:
- Describe and discuss the etiopathogenesis, clinical features, complications and management of Herpes Simplex Virus Infections and Varicella-Zoster Virus Infections.
Recommended reading for the class:
[1]pp. 1097–1104
[2]pp. 239–405
[3]pp. 331; 441

Class 30. Lecture 8.CMV, EBV. (2hrs)
Key questions covered in Lecture 8:
- Etiopathogenesis of infective causes of malignancy and explain the mechanisms used by oncogenic viruses in the development of virus-associated malignancies, along with their preventive measures.

Class 31. Practical class 23. CMV. Roseola in children (herpesvirus 6 type). (2hrs)
Key questions covered in Practical class 23:
-Describe the etiology, clinical features and management of Perinatal infections.
-Explain the etiopathogenesis, classification, clinical features, complication and management of Hydrocephalus in children.
Recommended reading for the class:
[1]pp. 1097–1104
[2]pp. 239–405
[3]pp. 331; 441

Class 32. Practical class 24. EBV. (2hrs)
Key questions covered in Practical class 24:
- Etiopathogenesis, clinical features, complications and management of EBV
Recommended reading for the class:
[1]pp. 1097–1104
[2]pp. 239–405
[3]pp. 331; 441

Class 33. Practical class 25. (2hrs)
Module 4
Key questions covered in Module 4:
-Solving MSQ (40)
-Solving clinical cases (10)
-Vivo session

-Essay on given topics:
-Etiopathogenesis, clinical features, complications and management of Herpes Simplex Virus Infections and Varicella Zoster infections.
- Etiopathogenesis of infective causes of malignancy and explain the mechanisms used by oncogenic viruses in the development of virus-associated malignancies, along with their preventive measures.
-Describe the etiology, clinical features and management of Perinatal infections.
-Explain the etiopathogenesis, classification, clinical features, complication and management of Hydrocephalus in children
- Etiopathogenesis, clinical features, complications and management of EBV.

Methodological instructions for the implementation of independent work on the discipline
For each topic, students, working independently, should be able:

- Unit1. Acute intestinal infections in children. Student should make the differential diagnosis chart for most common seen intestinal infections in children. Should write the essay or make the Ppt-presentation on the topics given in table of Individual Work of student/
- Unit 2. Viral hepatitis in children. Student should write the essay about classification of viral hepatitis by the mechanism of transmission. Should make the Ppt-presentation on topic: Mechanisms of jaundice, classification of jaundice. Student should make the Table of differential diagnosis table of viral hepatitis. Student should make the Table of antiviral therapy in children. Additional topics student can see in the chapter of Individual work of student.
- Unit 3. Acute respiratory infections in children. Student should make a diagram about classification of Acute respiratory viral infection in kids by localization of pathological process. Student should make the Table of differential diagnosis of ARVI. Student should write the essay about urgent symptoms in ARVI (neurotoxicosis, ARDS, ASLT).
- Unit 4. Herpetic infection in children. Student should make the diagram of Classification of herpetic infections. Student should make the Ppt – presentation about all herpetic infections.