



# Pediatric curriculum 2023-2024

# نبذة عن فرع طب الأطفال

في عام 2007 تأسست شعبة طب الأطفال بكادر متكون من الأستاذ الدكتور فارس بكر الصواف (عميد كلية طب نينوى في ذلك الوقت) والدكتور نشوان مصطفى الحافظ رئيس شعبة طب الأطفال والدكتور خليل ابراهيم . وكانت الشعبه تابعه لفرع الطب / كلية طب نينوى / جامعة الموصل.

حصلت الموافقة على استحداث فرع طب الأطفال في كلية طب نينوى للجامعة نينوى اعتبارا من السنه الدراسية 2018/4/26 حسب الأمر الجامعي المرقم م ب /454 في 2018/4/26

تم تكليف ا.د. نشوان مصطفى الحافظ برئاسة الفرع في 2018/10/24.

يتكون الفرع حاليا من استاذ وثلاثة اساتذة مساعدين وستة مدرسين

# قائمة تدريسيي فرع طب الاطفال للعام 2023-2024

### رئيس الفرع: ا.د. نشوان مصطفى سليمان الحافظ

تاريخ الحصول على اللقب	اللقب العلمي	الاختصاص الدقيق	الاختصاص	اسم التدريسي	الرقم
28/12/2020	استاذ		بورد عراقي طب اطفال	نشوان مصطفى سليمان	.1
2012/4/16	استاذ مساعد		بورد عراقي طب اطفال	بشار شاكر مصطفى	.2
2012/6/21	استاذ مساعد		بورد عربي طب اطفال	یسری احمد حسین	.3
10/8/2020	استاذ مساعد	امراض القلب	بورد عراقي طب اطفال	خلیل ابراهیم محمود	.4
2012/2/6	مدرس		بورد عراقي طب اطفال	علي عادل شريف	.5
2012/12/4	مدرس		بورد عراقي طب اطفال	اسيل سامي نوح	.6
2014/3/3	مدرس		بورد عربي طب اطفال	ايمان عصام محمد	.7
2014/8/7	مدرس		بورد عربي طب اطفال	ايمان شاكر محمود	.8
2017/6/11	مدرس		بورد عربي طب اطفال	احمد خلیل ابراهیم	.9
2016/5/30	مدرس		بورد عربي طب اطفال	رؤى فيصل محمد	.10
		العنايه المركزه لحديثي الولاده	بورد عراقي طب اطفال بورد عربي طب اطفال	مصعب مازن خلیل	.11

**Vision:** Graduating world class doctors

#### Message:

Graduating doctors with scientific competence, clinical skills and sufficient social communication capabilities that qualify them to diagnose and treat common pediatric diseases and know ways to prevent them

#### **Objectives:**

- Enable students to know the terminology of newborns, assess the clinical condition of the newly born child, , identify important clinical manifestations, evaluate and treat common diseases in newborns and prevent them.
- 2. Enable students to know the stages of development and growth according to the child's age groups.
- 3. Enabling students to know about nutrition problems in children and how to diagnose, treat and prevent them.
- 4. Enabling students to know the causes, clinical manifestations, and methods of diagnosis and treatment of common children's diseases and how to prevent them.
- 5. Enabling students to perform social communication skills and professional behavior in a satisfactory manner with patients and individuals in the community.
- 6. Introducing the student to his role after graduation in raising awareness and educating the community about common children's diseases and educating families about adherence to the vaccination schedule and commitment to the correct nutrition of children and the need to know global health threats and the best ways to deal with them.
- 7. Introducing the student to the right of every human being to receive exemplary medical, social and moral care.

- 8. Introducing the graduate to a continuous update of medical information, preparing the graduate and encouraging him for further learning.

  Defining it is the right of every human being to receive the latest scientific information and available capabilities.
- 9. Empowering the graduate with his scientific capabilities, clinical skills and sufficient social communication capabilities that qualify him to respond to the needs of individuals and society in an honest, efficient, professional and socially satisfactory manner.
- 10. Introducing the graduate to the existence of a link to stakeholders such as the Department of Health and the Physicians association, and they are thus active participants in planning the educational curriculum and its changes in response to the changing needs of the individual and society.

# Curriculum of Pediatrics Faculty of medicine/ Ninevah University

# Fifth stage

#### **Teaching for fifth class**

خبرات التعلم

نمط التدريس

Teaching designs for fifth class:

In theoretical teaching: combination of:

- Tutor centered:
- Student centered: by motivating the student to discuss and present part of the lecture.
- Interactive teaching:
- Case based learning:

In practical teaching: combination of

- Case based learning
- Field exercise

#### **Teaching methods:**

#### Teaching is on two levels, theoretical and practical

#### 1. Theoretical teaching:

Weekly hours:

Three hours / week / first semester

Three hours / week / second semester

Total: 65 hours per academic year

The lecture is conducted by the lecturer in the lecture hall with the commitment to the following:

- 1. Writing the objectives of the lecture at the beginning of each lecture.
- 2. Adopting the Google classroom approach, in downloading lectures few days prior to date of lecture, also downloading pictures and videos if needed, in order to assist the student in understanding
- The necessity of the student's participation by adopting the method of discussion, and motivating the student to discuss and present part of the lecture.
- 4. Supporting the lecture with educational techniques through the computer and data display device.
- 5. Make a short exam at the end of each lecture on the topic of the lecture. The examination have several forms including a few MCQ displayed at the end of power point presentation, or case scenarios and problem solving questions delivered to the student orally or through power point presentation

# Program outcomes and methods of teaching, learning and assessment of theoretical part

#### **Program outcomes:**

- Identifying the ways of feeding children, their benefits and problems
- Learn about vaccinations, their methods and times of their administration, and their side effects
- Knowing the important stages of growth and development in children
- Knowing the common diseases in children and their symptoms and signs
- Methods of diagnosing diseases
- Treatment and complications of diseases

#### Methods of teaching, learning

- 1. Attended theoretical lectures
- The participation of the student (student centered) by adopting the method of discussion and collective conclusion, and motivating the student to discuss and present part of the lecture.
- 3. Supporting the lecture with educational techniques through the computer and data display device
- 4. Do a short exam at the end of each lecture on the topic of the lecture

#### **Assessment**

- Midyear theoretical exam
- Final year theoretical exam

Theoretical mid-year: 20 marks including the exam

MCQ questions

Classified by blue print into 3 categories: remembering questions, understanding questions and problem solving questions

Theoretical end of the year: 70 marks

MCQ questions

#### Personal development planning objectives

- Planning to activate the student's role in preparing the study material and training after the end of cessions
- The ability to learn for life and search for the latest information

#### الجدول الزمني لمنهاج طب الأطفال / المرحله الخامسه

Theoretical lectures categorized according to systematic topics

عدد المحاضرات	اسم التدريسي	System	الرقم
3	د. احمد خلیل	Growth & development	.1
2	د. اسيل سامي	Infant feeding	.2
1	د. ايمان عصام	Immunization	.3
2	د. علي عادل	Nutritional disorders	.4
5	د. نشوان الحافظ	Gastrointestinal tract	.5
8	د. یسری احمد	Hematology & oncology	.6
5	د. احمد خلیل	Respiratory	.7
10	د. مصعب مازن	Neonatology	.8
5	د. خلیل ابراهیم	Cardiology	.9
4	د. اسيل سامي	Infections	.10
5	د. بشار شاکر	Renal system	.11
4	د. بشار شاکر	Endocrinology	.12
5	د. علي عادل	Neurology	.13
4	د. ایمان عصام	Genetic & Metabolic	.14
1	د. اسيل سامي	Poisoning	.15
1	د. اسيل سامي	Behavior	.16

## **Instructional objectives of lectures**

	Lecture title	Instructional objectives
	(Timing of each lecture is one hour)	
1	Infant feeding:	To define Colostrum & name its characteristics
	Breast feeding	<ul> <li>To describe advantages of breast feeding, disadvantages of breast feeding, contraindications to breast feeding, physiology of breast feeding, Initiation &amp; frequency and duration of breast feeding</li> <li>To demonstrate determination of breast milk supply adequacy, supplementation of breast-fed baby</li> </ul>
		To discuss weaning from breast-feeding & common breast-feeding problems
2	Infant feeding:	To Compare with human milk with cow's milk and infant formula ,
	Bottle feeding	To identify types and properties of infant formulae
		<ul> <li>To discuss colic definition, etiology, differential diagnosis, prevention and treatment</li> </ul>
3	Child growth	<ul> <li>Remembering (Knowledge):Definition of growth &amp; development, Stages of growth &amp;development, Normal growth parameters and Types of growth charts.</li> </ul>
		<ul> <li>Understanding (Comprehension): Our goal of knowing normal growth&amp; development and how to take growth parameters.</li> </ul>
		<ul> <li>Applying (Application): How would you Recommended routine office visits to follow up child growth&amp; development.</li> </ul>
		<ul> <li>Analyzing (Analysis): Factors affecting growth &amp; development.</li> </ul>
		• Evaluating (Evaluation): Assess How to put growth parameters on growth charts and assess different

	growth abnormalities.
	• Creating (Synthesis): Design a comprehensive care plan for a child with Specific Growth Patterns Requiring Further Evaluation.
4 Child development (1)	<ul> <li>Remembering (Knowledge): What are the are the four fields of development? Definition of Adolescence</li> <li>Understanding (Comprehension): Understanding the sequential changes in milestons in four fields of development from neonatal period till five years.</li> </ul>
	<ul> <li>Applying (Application): How would you apply the developmental milstones to assess the child age &amp; development (normal or delay ).</li> </ul>
	<ul> <li>Analyzing (Analysis): Red Flags in Developmental Screening and Surveillance.</li> </ul>
	• Evaluating (Evaluation): Assess the child School Readiness ,physician & parent observations .
	Creating (Synthesis): Design a comprehensive care plan for a child with developmetal delay.
5 Child development (2)	<ul> <li>Remembering (Knowledge): What are the are the four fields of development? Definition of Adolescence</li> </ul>
	<ul> <li>Understanding (Comprehension): Understanding the sequential changes in milestons in four fields of development from neonatal period till five years.</li> </ul>
	<ul> <li>Applying (Application): How would you apply the developmental milstones to assess the child age &amp; development (normal or delay ).</li> </ul>
	<ul> <li>Analyzing (Analysis): Red Flags in Developmental Screening and Surveillance.</li> </ul>
	Evaluating (Evaluation): Assess the child School

		Readiness ,physician & parent observations
		Creating (Synthesis): Design a comprehensive care
		plan for a child with developmetal delay .
6	Childhood immunization:	To recognize the Iraqi immunization schedule
	mmumzation.	The students should be able to describe type, route and dose of each vaccine.
		The students should be able to list the side effects and contraindications of each vaccine
		To understand what to check before giving a vaccine
7	Failure to thrive (FTT)	Domomhoring (Vnowledge): Define ETT What are
,	randre to thrive (F11)	<ul> <li>Remembering (Knowledge): Define FTT. What are the criteria for diagnosing FTT? Can you list the types of FTT?</li> </ul>
		Understanding (Comprehension): Explain the etiology of FTT. Describe the approach to a child with FTT.
		Applying (Application): How would you apply the criteria to diagnose FTT in a real-world scenario?  Demonstrate how to approach a child with FTT.
		<ul> <li>Analyzing (Analysis): Compare and contrast the different types of FTT. Analyze the causes and effects of each type.</li> </ul>
		• Evaluating (Evaluation): Assess the effectiveness of different treatments for FTT. Justify your choice of treatment for a given case study.
		<ul> <li>Creating (Synthesis): Design a comprehensive care plan for a child with FTT, incorporating definition, etiology, clinical features, complications,</li> </ul>
		investigations, and treatment of Marasmus and Kwashiorkor.
8	Rickets	Remembering (Knowledge): Can you recall the normal metabolism of vitamin D? What is the

		<ul> <li>definition of rickets?</li> <li>Understanding (Comprehension): Explain the</li> </ul>
		etiology of rickets. Describe the clinical manifestations of rickets.
		<ul> <li>Applying (Application): How would you apply your knowledge of vitamin D metabolism to understand the etiology of rickets? Demonstrate how to identify clinical manifestations of rickets in a patient.</li> <li>Analyzing (Analysis): Analyze the radiological and laboratory findings typically seen in a patient with rickets. What do these findings tell us about the disease?</li> <li>Evaluating (Evaluation): Assess the effectiveness of different treatments for rickets based on guidelines. Justify your choice of treatment for a given case study.</li> <li>Creating (Synthesis): Design a comprehensive care plan for a patient with rickets, incorporating your understanding of vitamin D metabolism, the definition and etiology of rickets, its clinical</li> </ul>
		manifestations, radiological and laboratory findings, and treatment guidelines.
9	Neonatology:	Define important terms in Neonatology.
	Lecture 1	Describe neonatal physical examination
	:terminology &Neonatal Examination	• Demonstrate different lesions found during neonatal exam.
		• Estimation of gestational age.
		How to do neonatal reflexes
10	Neonatology Lecture 2	<ul> <li>Understanding routine delivery care and resuscitation</li> </ul>
	Neonatal resuscitation	Recognize APGAR score
	and preterm birth & IUGR &LGA	Demonstration of thermoregulation
		• Distinguish between preterm & low birth weight.
		• Assess the Common problems associated with prematurity.
		Complication of IUGR &LGA

11	Neonatology Lecture 3:	Recognize types of birth injury& its predisposing factors.
	Birth injury and Neonatal seizure	Describe Neonatal seizure and classify according to its onset.
		Demonstrate Hypoxic Ischemic Encephalopathy ,stages ⁢`s prognosis
		Differentiate intracranial hemorrhage.
12	Neonatology Lecture 4:	Recognize infant of Diabetic mother ,Neonatal hypoglycemia, Neonatal hypocalcemia
	Metabolic disorder in	Describe causes, clinical manifestation.
	neonate & TEF	Demonstrate complications associated with infant of DM mother
		Analyze the pathophysiology of infant of DM mother
		Plan for management of infant of DM mother
		Assess for prognosis
13	Neonatology	Define respiratory distress syndrome.
	Lecture 5:	Explain etiology and pathophysiology.
	Respiratory distress syndrome ( part 1)	Demonstrate the diagnosis of respiratory distress syndrome.
		Plan for management of bay with respiratory distress syndrome.
		Assess the common complication of RDS.
14	Neonatology	Define Transient tachypnea of newborn &how can
	Lecture 6:	differentiated from other serious respiratory disorder.
	_Respiratory disorder in Neonate, part 2	Describe Meconium aspiration syndrome.
		• Explain what is apnea? What are its different types.
		Distinguish Common congenital anomaly associated

		with resp system .
		Describe Esophageal Atresia and Tracheoesophageal Fistula
16	Neonatology Lecture 7: Neonatal jaundice (part 1)  Neonatology Lecture 8: Neonatal jaundice (part 2)	<ul> <li>Recognize neonatal jaundice .</li> <li>Describe Different type of neonatal jaundice.</li> <li>Demonstrate Criteria of physiological &amp; pathological jaundice.</li> <li>Distinguish Kernicterus ? what are the clinical feature.</li> <li>Plan treatment option for indirect hyperbilirubinemia.</li> <li>Recognize phototherapy including its indications ,complications.</li> <li>Describe Exchange transfusion including its indications, complications.</li> </ul>
		<ul> <li>Identify Direct hyperbilirubinemia,causes&amp;managment.</li> <li>Discuss Hemorrhagic disease of newborn .</li> </ul>
17	Neonatology Lecture 9: Neonatal sepsis& Necrotizing Enterocolitis	<ul> <li>Define neonatal sepsis .</li> <li>Discuss incidence and epidemiology .</li> <li>Demonstrate types of sepsis and clinical presentation .</li> <li>Compare the pathogenesis according to types of sepsis.</li> <li>Plan for management of neonatal sepsis.</li> <li>Assessing prevention of neonatal sepsis.</li> <li>Describe Necrotizing Enterocolitis</li> </ul>
18	Lecture 10: Congenital infection	<ul> <li>List congenital infection.</li> <li>Discuss clinical manifestation.</li> </ul>

		Distinguish diagnosis.
		Identify treatment.
19	Human Genetics& Dysmorphology: part 1	Define the terms genetic disorder, genetic screening, genetic counseling, Achondroplasia, and Marfan Syndrome. Recall the basic principles of genetics and inheritance.
		<ul> <li>Explain the types, causes, and effects of common genetic disorders in children, including Achondroplasia and Marfan Syndrome. Describe the methods and purposes of genetic screening and counseling.</li> </ul>
		• Apply the concepts of genetics and inheritance to analyze family histories and pedigrees. Demonstrate how to perform and interpret genetic screening tests.
		<ul> <li>Analyze the relationship between genetic factors and environmental factors in the development of genetic disorders. Compare and contrast different types of genetic disorders, including Achondroplasia and Marfan syndrome, and their management.</li> </ul>
		<ul> <li>Evaluate the benefits and limitations of genetic screening and counseling. Justify the ethical and legal issues involved in genetic testing and decision making.</li> </ul>
		<ul> <li>Create a comprehensive care plan for a child with a genetic disorder, including Achondroplasia or Marfan Syndrome, incorporating the principles of genetics, screening, counseling, and treatment.</li> </ul>
20	Human Genetics&	Define the terms genetic disorder, genetic screening,
	Dysmorphology: part 2	genetic counseling, Turner Syndrome, and Down Syndrome. Recall the basic principles of genetics and inheritance.
		Explain the types, causes, and effects of common genetic disorders in children, including Turner Syndrome and Down syndrome. Describe the  17

21	GIT  Gastroenteritis: part 1	methods and purposes of genetic screening and counseling.  Apply the concepts of genetics and inheritance to analyze family histories and pedigrees. Demonstrate how to perform and interpret genetic screening tests.  Analyze the relationship between genetic factors and environmental factors in the development of genetic disorders. Compare and contrast different types of genetic disorders and their management, such as Turner Syndrome and Down syndrome.  Evaluate the benefits and limitations of genetic screening and counseling. Justify the ethical and legal issues involved in genetic testing and decision making.  Create a comprehensive care plan for a child with a genetic disorder, such as Turner Syndrome or Down syndrome, incorporating the principles of genetics, screening, counseling, and treatment.  By the end of this lecture ,the student will  Define Diarrhea?  Illustrate the assessment of a child with diarrhea  Identify the etiology of acute diarrhea?  Recognize the risk factors for gastroenteritis in children  Explain why Infants are at particular risk of dehydration?  Analyze and compare the clinical manifestation of viral gastroenteritis, bacterial gastroenteritis, parasitic gastroenteritis
		<ul> <li>Value the investigation of a child with gastroenteritis</li> </ul>
		Plan the differential diagnosis of a child with gastroenteritis
22	GIT	By the end of this lecture ,the student will
	Gastroenteritis : part 2	Asses type of dehydration and plan the management.
		18

		Distinguish clinically the etiology of diarrhea.
		Recognize the complications of G.E
		Deview the preventive recovers for C.F.
		Review the preventive measures for G.E
23	GIT	By the end of this lecture ,the student will
	Infantile colic , GER	
	illiantile colic , GER	Define infantile colic?
		Criticize the causes of infantile colic?
		Distinguish the clinical features of infantile colic
		Analyze the differential diagnosis of infantile colic
		Demonstrate the treatment of infantile colic
		<ul> <li>Illustrate the Techniques for calming infants of Dr.</li> <li>Harvey Karp</li> </ul>
		Review the prognosis of colic
		<ul> <li>Define gastroesophageal reflux (GER)?</li> </ul>
		Distinguish the factors that involved in physiologic GER?
		Identify the criteria for physiologic GER?
		Identify the criteria for pathological GER?
		Illustrate how do you diagnose a physiologic GER?
		Manage uncomplicated GER
		Manage complicated GER
		Discuss surgical treatment of complicated GER
		Recognize the prognosis of physiologic GER
24	GIT	By the end of this lecture ,the student will
	Chronic diarrhea	Define celiac disease?
		Recognize the pathogenesis of celiac disease
		Identify the clinical presentation of celiac disease?
		Analyze Screening of celiac disease
		Plan the Diagnosis of celiac disease
		Manage celiac disease
		Discuss prognosis of celiac disease
		Identify the clinical manifestation of lactose intolerance

		<ul> <li>Plan Diagnosis of lactose intolerance</li> <li>Manage lactose intolerance</li> <li>Identify the clinical manifestation of Cow milk protein intolerance</li> <li>Plan Diagnosis of Cow milk protein intolerance</li> <li>Manage Cow milk protein intolerance</li> </ul>
		<ul> <li>Identify the clinical manifestation of Toddler diarrhea</li> <li>Manage Toddler diarrhea</li> </ul>
25	GIT	By the end of this lecture ,the student will
	Constipation	Define Constipation?
		<ul> <li>Discuss the diagnostic criteria for functional constipation?</li> </ul>
		Identify the potential alarm features in constipation
		Recognize the causes of functional constipation?
		Identify the clinical features of functional constipation?
		Discuss the differential diagnosis of functional constipation
		Manage functional constipation
		Review few specific causes of constipation ( non - functional constipation)
26	Metabolic Inborn error of metabolism	<ul> <li>To describe different type of Inborn error of metabolism according to their clinical feature including (Phenylketonuria, Homocystinuria and Galactosemia).</li> <li>To be able to identify the main diagnostic tests of Inborn</li> </ul>
		error of metabolism
		To be able to identify the line of treatment of Inborn

		error of metabolism
27	Metabolic Inborn error of metabolism	<ul> <li>To be able to describe the Clinical presentation of different type of Glycogen storage diseases and Mucopolysaccharidoses.</li> <li>To be able to identify the main diagnostic tests of Glycogen storage diseases and Mucopolysaccharidoses.</li> <li>To be able to enumerate the line of treatment of Glycogen storage diseases and Mucopolysaccharidoses.</li> <li>To list clinical feature ,line of treatment of Wilson disease</li> </ul>
28	Respiratory  Common cold  Acute pharyngitis and tonsillitis	<ul> <li>1.Remembering (Knowledge): The definition and epidemiology of common cold and Acute Pharyngitis.</li> <li>2.Understanding (Comprehension): Understanding the etiology of The common cold and Acute Pharyngitis.</li> <li>Describe the clinical manifestations of The common cold&amp; Acute Pharyngitis.</li> <li>3.Applying (Application): Demonstrate how to identify clinical manifestations of The common cold and Acute Pharyngitis in a patient.</li> <li>4.Analyzing (Analysis): Analyze the physical finding, the radiological, laboratory and examination findings typically seen in a patient with The common cold and Acute Pharyngitis. What do these findings tell us about the disease?</li> <li>5.Evaluating (Evaluation): Assess the effectiveness of different treatments for The common cold and Acute Pharyngitis based on guidelines. Justify your choice of treatment for a given case study.</li> <li>6.Creating (Synthesis): Design a comprehensive care plan for a child with The common cold and Acute Pharyngitis, incorporating definition, etiology, clinical features, complications, investigations, and treatment</li> </ul>
29	Respiratory	2- Upper Airway Obstruction
<u> </u>		21

	Croup, Acute epiglottitis,	<ul> <li>1.Remembering (Knowledge): The definition and epidemiology of Croup &amp; Acute Epiglottitis,</li> </ul>
L	aryngomalacia, oreign bodies in the	Laryngomalacia and Foreign Bodies in the Airway.
	airway	<ul> <li>2.Understanding (Comprehension): Understanding the etiology of Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway. Describe the clinical manifestations of Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway.</li> </ul>
		<ul> <li>3.Applying (Application): Demonstrate how to identify clinical manifestations of Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway in a patient.</li> </ul>
		<ul> <li>4.Analyzing (Analysis): Analyze the physical finding, the radiological, laboratory and examination findings typically seen in a patient with Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway. What do these findings tell us about the disease?</li> </ul>
		<ul> <li>5.Evaluating (Evaluation): Assess the effectiveness of different treatments for Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway based on guidelines. Justify your choice of treatment for a given case study.</li> </ul>
		<ul> <li>6.Creating (Synthesis): Design a comprehensive care plan for a child with Croup &amp; Acute Epiglottitis, Laryngomalacia and Foreign Bodies in the Airway, incorporating definition, etiology, clinical features, complications, investigations, and treatment</li> </ul>
30 R	Respiratory  Acute	<ul> <li>1.Remembering (Knowledge): The definition and epidemiology of Acute Bronchiolitis &amp; Community- Acquired Pneumonia.</li> </ul>
	bronchiolitis, Community acquired pneumonia	<ul> <li>2.Understanding (Comprehension): Understanding the etiology of Acute Bronchiolitis &amp; Community-Acquired Pneumonia . Describe the clinical manifestations of Acute Bronchiolitis &amp; Community-Acquired Pneumonia.</li> </ul>
		<ul> <li>3.Applying (Application): Demonstrate how to identify clinical manifestations of Acute Bronchiolitis &amp;</li> </ul>

		Community-Acquired Pneumonia in a patient.
		<ul> <li>4.Analyzing (Analysis): Analyze the physical finding, the radiological, laboratory and examination findings typically seen in a patient with Acute Bronchiolitis &amp; Community-Acquired Pneumonia. What do these findings tell us about the disease?</li> <li>5.Evaluating (Evaluation): Assess the effectiveness of different treatments for Acute Bronchiolitis &amp; Community-Acquired Pneumonia based on guidelines. Justify your choice of treatment for a given case study.</li> </ul>
		<ul> <li>6.Creating (Synthesis): Design a comprehensive care plan for a child with Acute Bronchiolitis &amp; Community- Acquired Pneumonia, incorporating definition, etiology, clinical features, complications, investigations, and treatment.</li> </ul>
31	Respiratory  Asthma in	1.Remembering (Knowledge): The definition and epidemiology of Childhood Asthma.
	children, Status asthmaticus	2.Understanding (Comprehension): Understanding the etiology and pathogenesis of Childhood Asthma .  Describe the clinical manifestations of Childhood Asthma
		3.Applying (Application): Demonstrate how to identify clinical manifestations of Asthma in a patient.
		<ul> <li>4.Analyzing (Analysis): Analyze the physical finding, the radiological, laboratory and examination findings typically seen in a patient with Asthma. What do these findings tell us about the disease?</li> </ul>
		<ul> <li>5.Evaluating (Evaluation): Assess the effectiveness of different treatments for Asthma based on guidelines.</li> <li>Justify your choice of treatment for a given case study.</li> </ul>
		<ul> <li>6.Creating (Synthesis): Design a comprehensive care plan for a child with Asthma, incorporating definition, etiology, clinical features, complications, investigations, and treatment.</li> </ul>

32	Respiratory	1.Remembering (Knowledge): The definition and
	Cystic fibrosis	epidemiology of Cystic Fibrosis.
		2.Understanding (Comprehension): Understanding the
		etiology and pathogenesis of Cystic Fibrosis . Describe
		the clinical manifestations of Cystic Fibrosis
		<ul> <li>3.Applying (Application): Demonstrate how to identify clinical manifestations of Cystic Fibrosis in a patient.</li> <li>4.Analyzing (Analysis): Analyze the physical finding, the</li> </ul>
		radiological, laboratory and examination findings typically seen in a patient with Cystic Fibrosis. What do these findings tell us about the disease?  • 5.Evaluating (Evaluation): Assess the effectiveness of
		different treatments for Cystic Fibrosis based on guidelines. Justify your choice of treatment for a given case study.
		<ul> <li>6.Creating (Synthesis): Design a comprehensive care plan for a child with Cystic Fibrosis, incorporating definition, etiology, clinical features, complications, investigations, and treatment.</li> </ul>
33	Infectious  Common childhood rashes	To Describe etiology, epidemiology, clinical features, complications, diagnosis, treatment, prognosis & prevention of measles, rubella, varicella, erythema infectiosum, rosella infantum & scarlet fever
34	Infectious	To illustrate etiology, epidemiology, clinical features,
	Meningitis & encephalitis:	complications, diagnosis, treatment, prognosis & prevention of meningitis & encephalitis
35	Infectious	To review etiology, epidemiology, clinical features,
	Mumps, pertussis, diphtheria:	complications, diagnosis, treatment, prognosis & prevention of mumps, pertussis & diphtheria
36	Infectious	To recognize etiology, epidemiology, clinical features,
	Polio,	complications, diagnosis, treatment, prognosis & prevention of infectious mononucleosis, poliomyelitis &
	Infectious mononucleosis, Kala-azar	Kala-azar

37	Renal	Can recall the normal function of the kidney and
		correlation with their anatomy? what is the definition of
	Acute renal failure	renal failure
		Explain the etiology of acute Renal failure, describe the
		clinical scenario of acute Renal failure
		How would you apply your knowledge of acute Renal
		failure in regarding to hemostatic mechanism to
		understand the etiology of acute renal failure?
		Analyze the laboratory findings with their clinical
		presentation in patient with acute renal failure what do
		these findings provide us about the disease
		Assess the effective approaches and different
		treatments for acute Renal failure based on guidelines
		present and discuss clinical scenario of acute renal
		failure and try to solve this scenario practically
		design a comprehensive care plan for patient with acute
		renal failure from definition, etiology, clinical
		presentation, laboratory findings and treatment guidelines.
38	Renal	Explain each complication of ARF and analyzed it
36	Keliai	according to their physiological dysfunctioning
	Complications of ARF	<ul> <li>Important awareness of Complications and their sequels.</li> </ul>
		<ul> <li>Important awareness of complications and their sequels.</li> <li>Important awareness of their management immediately</li> </ul>
		Management of the hyperkalemia which considered
		common crucial complication
		Knowledge about the dialysis
		Knowledge and awareness of indications for dialysis and
		whom patients need for dialysis
39	Renal	By the end of the lecture the student can :
		Objective of hematuria
	Acute nephritis	1. Can recall the definition of hematuria? what are the
		main types of hematuria
		2. Explain the etiology of hematuria and relation to their
		anatomical structure
		3. how to applied clinical evaluation of the child with
		hematuria
		Objective of acute Post streptococcal
		Glomerulonephritis
		1. Can recall the definition of acute Post streptococcal
		Glomerulonephritis
		2. Explain the etiology acute Post streptococcal
		Glomerulonephritis
		3. How would you apply your pathophysiological
		knowledge of acute Post streptococcal
		Glomerulonephritis and how to approach a clinical case
		of acute Post streptococcal Glomerulonephritis
		4. Analyze the laboratory findings with their clinical
		presentation in patient with acute Post streptococcal

		Glomerulonephritis what do these findings provide us
		about the disease
		<ul> <li>5. Assess the effective approaches and different</li> </ul>
		treatments for acute Post streptococcal
		Glomerulonephritis based on guidelines
		<ul> <li>6. design a comprehensive care plan for patient with</li> </ul>
		acute Post streptococcal Glomerulonephritis from
		definition, etiology, clinical presentation, laboratory
		findings and treatment guidelines.
		•
40	Renal	1. Can recall the definition and the Awareness of about
	Hamaah Cahämlain	Henoch-Schönlein purpura
	Henoch-Schönlein	2. Explain the etiology of Henoch-Schönlein purpura
	purpura and	3. How would you apply your knowledge of Henoch-
	Hemolytic-Uremic	Schönlein purpura
	Syndrome .	and how to approach to a clinical case
		4. Analyze the laboratory findings with their clinical
	Urinary tract infection	presentation in patient with Henoch-Schönlein purpura
		what do these findings provide us about the disease
		5. Assess the effective approaches and different
		treatments for Henoch-Schönlein purpura based on
		guidelines
		6. design a comprehensive care plan for patient with  Honord Schönlein purpusa from definition, etiplogram
		Henoch-Schönlein purpura from definition, etiology, clinical presentation, laboratory findings and treatment
		guidelines.
		Objective of Hemolytic-Uremic Syndrome
		1.Can recall the definition and the Awareness of about
		Hemolytic-Uremic Syndrome
		2.Explain the etiology of Hemolytic-Uremic Syndrome
		3. How would you apply your knowledge of Hemolytic-
		Uremic Syndrome and how to approach to a clinical case
		4. Analyze the laboratory findings with their clinical
		presentation in patient with Hemolytic-Uremic
		Syndrome what do these findings provide us about the
		disease
		5. Assess the effective approaches and different
		treatments for Hemolytic-Uremic Syndrome based on
		guidelines
		6. design a comprehensive care plan for patient with
		Hemolytic-Uremic Syndrome from definition, etiology,
		clinical presentation, laboratory findings and treatment
		guidelines.
		Objective of Urinary tract infection
		1. Can recall the the definition of urinary tract infection
		and the Awareness of the disease regarding different
		presentation according their age
		2. Explain the etiology of the urinary tract infection and

		<ul> <li>their different etiology according to the age of the patients</li> <li>3. How would you apply your knowledge of the urinary tract infection</li> <li>and how to approach to a clinical case</li> <li>4. Analyze the laboratory and radiological findings with their clinical presentation in patient with the urinary tract infection what do these findings tell us about the disease</li> <li>5. Assess the effective approaches and different treatments for the urinary tract infection based on guidelines</li> <li>6. design a comprehensive care plan for patient with the urinary tract infection from definition, etiology, clinical presentation, radiological finding and treatment guidelines.</li> </ul>
41	Nephrotic syndrome	<ul> <li>1.Can recall the definition of Nephrotic syndrome and the Awareness of about proteinuria</li> <li>2.Explain the etiology and pathophysiology of Nephrotic syndrome</li> </ul>
		<ul> <li>How would you apply your knowledge of Nephrotic syndrome</li> <li>and how to approach to a clinical case</li> </ul>
		<ul> <li>Analyze the laboratory findings with their clinical presentation in patient with Nephrotic syndrome what do these findings provide us about the disease</li> </ul>
		<ul> <li>Assess the effective approaches and different treatments for Nephrotic syndrome based on guidelines</li> </ul>
		<ul> <li>6. design a comprehensive care plan for patient with Nephrotic syndrome from definition, etiology, clinical presentation, laboratory findings and treatment guidelines</li> </ul>
42	CNS  Congenital anomalies of CNS (Neural tube defects)	<ul> <li>Remembering (Knowledge): Can you recall the normal development of the CNS? What are the types of neural tube defects?</li> <li>Understanding (Comprehension): Explain the prevention and prenatal screening methods for neural tube defects. Describe the definitions and etiologies of microcephaly and macrocephaly.</li> </ul>

Applying (Application): How would you apply your knowledge of CNS development to understand neural tube defects? Demonstrate how to approach a clinical case of microcephaly or macrocephaly. Analyzing (Analysis): Analyze the clinical presentation and investigation findings typically seen in a patient with hydrocephalus. What do these findings tell us about the disease? Evaluating (Evaluation): Assess the effectiveness of different treatments for hydrocephalus based on current guidelines. Justify your choice of treatment for a given case study. Creating (Synthesis): Design a comprehensive care plan for a patient with hydrocephalus, incorporating your understanding of CNS development, neural tube defects, microcephaly, macrocephaly, and the definition, etiology, types, clinical presentation, investigation, and treatment of hydrocephalus. Remembering (Knowledge): Can you recall the definition **CNS** of cerebral palsy? What are the main types of cerebral Cerebral palsy palsy? Understanding (Comprehension): Explain the etiology of cerebral palsy. Describe the different classifications of cerebral palsy. Applying (Application): How would you apply your knowledge to identify clinical manifestations of cerebral palsy in a patient? Demonstrate how to approach a clinical case of cerebral palsy. Analyzing (Analysis): Analyze the relationship between the etiology and types of cerebral palsy. What do these findings tell us about the disease? Evaluating (Evaluation): Assess the effectiveness of different treatment strategies for cerebral palsy based on current guidelines. Justify your choice of treatment for a given case study. Creating (Synthesis): Design a comprehensive care plan for a patient with cerebral palsy, incorporating your understanding of its definition, etiology, classifications,

		types, investigations, and treatment strategies.
44	CNS Seizure in childhood	<ul> <li>Remembering (Knowledge): Can you recall the definition of epilepsy? What are the main classifications of epileptic seizures?</li> <li>Understanding (Comprehension): Explain the different types of seizures such as partial seizures, generalized seizures, Rolandic epilepsy, absence, generalized tonic-clonic myoclonic epilepsy, infantile spasm, febrile convulsions, neonatal convulsions, and status epilepticus.</li> </ul>
		<ul> <li>Applying (Application): How would you apply your knowledge to identify different types of seizures in a child? Demonstrate how to approach a clinical case of a child with seizures.</li> </ul>
		<ul> <li>Analyzing (Analysis): Analyze the relationship between the type of seizure and its clinical manifestations. What do these findings tell us about the disease?</li> </ul>
		<ul> <li>Evaluating (Evaluation): Assess the effectiveness of different treatment strategies for seizures based on current guidelines. Justify your choice of treatment for a given case study.</li> </ul>
		<ul> <li>Creating (Synthesis): Design a comprehensive care plan for a child with seizures, incorporating your understanding of its definition, classifications, types, and treatment strategies.</li> </ul>
45	CNS Neurocutaneous disorders	<ul> <li>Remembering (Knowledge): Can you recall the definitions of Neurofibromatosis, Tuberous Sclerosis, and Sturge-Weber Syndrome? What are the main clinical features of these disorders?</li> <li>Understanding (Comprehension): Explain the etiology of these disorders. Describe the complications that can arise from these disorders.</li> <li>Applying (Application): How would you apply your knowledge to identify clinical features of these disorders in a patient? Demonstrate how to approach a clinical case of a patient with these disorders.</li> <li>Analyzing (Analysis): Analyze the relationship between the etiology and clinical manifestations of these</li> </ul>

		<ul> <li>disorders. What do these findings tell us about the disease?</li> <li>Evaluating (Evaluation): Assess the effectiveness of different treatment strategies for these disorders based on current guidelines. Justify your choice of treatment for a given case study.</li> <li>Creating (Synthesis): Design a comprehensive care plan for a patient with these disorders, incorporating your understanding of their etiology, clinical features, complications, investigations, and treatment strategies.</li> </ul>
46	CNS Floppy infant syndrome	<ul> <li>Remembering (Knowledge): Can you recall the etiology of Floppy Infant Syndrome? What are the diseases associated with upper and lower motor neuron lesions?</li> <li>Understanding (Comprehension): Explain the classifications of diseases associated with Floppy Infant Syndrome. Describe the definition, etiology, types, clinical presentation, investigation, and treatment of Spinal Muscular Atrophy and Guillain-Barre Syndrome.</li> <li>Applying (Application): How would you apply your knowledge to identify clinical features of these disorders in a patient? Demonstrate how to approach a clinical case of a patient with these disorders.</li> <li>Analyzing (Analysis): Analyze the relationship between the etiology and clinical manifestations of these disorders. What do these findings tell us about the disease?</li> <li>Evaluating (Evaluation): Assess the effectiveness of different treatment strategies for these disorders based on current guidelines. Justify your choice of treatment for a given case study.</li> <li>Creating (Synthesis): Design a comprehensive care plan for a patient with these disorders, incorporating your understanding of their etiology, classification, and treatment strategies.</li> </ul>
47	Hematology	By the end of this lecture, the student supposed to
	Anemia	be able to:
		30

		Define anemia according to the normal range.
		List the etiological classification of anemia.
		Differentiate between congenital hypoplastic anemia and TEC.
		Demonstrate the underlying causes of anemia of chronic diseases.
		<ul> <li>Explain physiological anemia of infancy and compare between premature and full term baby.</li> </ul>
		Discuss the diagnosis and treatment of main types
		of megaloblastic anemia.
48	Hematology	By the end of this lecture, the student supposed to be able to:
	Iron Deficiency Anemia	
		Identify the most common types of anemia.
		<ul> <li>Distinguish important causes of iron deficiency anemia.</li> </ul>
		Conclude clinical feature of iron deficiency anemia.
		<ul> <li>Differentiate laboratory findings of hypochromic microcytic anemia.</li> </ul>
		<ul> <li>Plan treatment and follow up of a patient with iron deficiency anemia.</li> </ul>
49	<b>Hematology</b> Hemolytic Anemia	By the end of this lecture, the student is supposed to be able to:
	Tremory de 7 die ma	Define hemolytic anemia.
		<ul> <li>Classify hemolytic anemia according to the etiology.</li> </ul>
		<ul> <li>Enumerate the laboratory investigations that are required for diagnosis.</li> </ul>
		<ul> <li>4-Illustrate the mode of inheritance and genetic counseling for inherited disease.</li> </ul>
		31

50	Hematology Hemoglobinopathies	<ul> <li>Review spherocytosis from (history, clinical and lab. investigation).</li> <li>Enumerate the indications for splenectomy in spherocytosis.</li> <li>Distinguish between clinical presentation and laboratory finding</li> <li>of G6PD deficiency and other hemolytic anemia.</li> <li>By the end of this lecture, the students supposed to be able to:         <ul> <li>Identify the pathogenesis of hemoglobinopathies.</li> <li>Differentiate between sickle cell disease and thalassemia.</li> <li>Select the diagnostic test (Hb variant) for hemoglobinopathies.</li> <li>Compare different types of hemoglobinopathies regarding treatment.</li> </ul> </li> </ul>
51	Hematology Bleeding Disorders	<ul> <li>By the end of this lecture, the students supposed to: <ul> <li>Discuss clinical and laboratory evaluation of hemostatic disorder.</li> <li>Identify usage of blood and blood product.</li> <li>Select ABO-Compatible blood product.</li> <li>Apply safely blood transfusion.</li> <li>Explain different types of hemophilia and mode of inheritance.</li> <li>Distinguish between many types of bleeding disorders.</li> <li>Interpret laboratory tests.</li> <li>Decide doing bone marrow examination and splenectomy.6- Differentiate between many</li> </ul> </li></ul>

		types of bleeding disorders.
52	Oncology	By the end of this lecture, the students supposed to:
	Leukemia	<ul> <li>Enumerate predisposing factors for childhood malignancy.</li> </ul>
		Explain important signs of childhood cancers.
		<ul> <li>Analyze why proliferation of leukemic cells contribute to clinical</li> </ul>
		manifestations of leukemia.
		<ul> <li>Recognize the importance of a bone marrow aspiration or biopsy.</li> </ul>
		<ul> <li>6- Plan approaches to establish a diagnosis and initial management of leukemia.</li> </ul>
53	Oncology	By the end of this lecture, the students supposed to:
	Childhood Lymphoma	Demonstrate pathogenesis of lymphoma.
		Plan staging of lymphoma.
		<ul> <li>Classify lymphoma as Hodgkin Lymphoma and Non-Hodgkin Lymphoma.</li> </ul>
		<ul> <li>4- Manage diagnosis and treatment of lymphoma.</li> </ul>
54	Oncology Solid Tumor	<ul> <li>By the end of this lecture, the students supposed to:</li> <li>Explain important points in diagnosis and manage brain tumor.</li> <li>Distinguish different types of brain tumor.</li> <li>Illustrate staging of Wilms Tumor (Nephroblastom</li> <li>4- Manage neuroblastoma.</li> </ul>
55	Endocrine  Congenital hypothyroidism.  Short stature	<ul> <li>Can recall the normal physiology of endocrine and how thyroid functioning? what is the deficongenital hypothyroidism</li> <li>Explain the etiology of hypothyroidism, ar pathophysiology</li> <li>How would you apply your knowledge of hypoth in regarding to thyroid physiology to underst etiology of hypothyroidism?</li> <li>Analyze the laboratory findings with their</li> </ul>

		presentation in patient with congenital hypoth what do these findings provide us about the disea  Assess the effective approaches and different tree for congenital hypothyroidism based on guidelines  present and discuss clinical scenario of congenity and try to focus on preventive act  design a comprehensive care plan for patiencongenital hypothyroidism from definition, clinical presentation, laboratory findings and try guidelines  Short stature  What are general knowledge of short stature  What is the definition of short stature?  Explain the underlying causes of short stature?
56	Endocrine Diabetic mellitus	<ul> <li>What is the definition of Diabetic mellitus? and consequence of insulin deficiency on vital body organs</li> </ul>
		<ul> <li>can recall the classification and types of diabetic mellitus and identify the diagnostic criteria</li> </ul>
		<ul> <li>Explanation of impaired glucose tolerance state and test.</li> </ul>
		<ul> <li>Explain the etiology of diabetic mellitus and their pathophysiology</li> </ul>
		<ul> <li>Analyze the laboratory findings with their clinical presentation in patient with Diabetic mellitus what do these findings provide us about the disease</li> </ul>
		<ul> <li>Assess the effective approaches and different treatments for Diabetic mellitus based on guidelines</li> </ul>
		<ul> <li>present and discuss clinical scenario of Diabetic mellitus and try to focus on dosage form of insulin therapy</li> </ul>
		<ul> <li>design a comprehensive care plan for patient with Diabetic mellitus from definition, etiology, clinical presentation, laboratory findings and treatment guidelines</li> </ul>

57	Endocrine	<ul> <li>Can recall the important complications of Diabetic mellitus</li> </ul>
	Diabetic ketoacidosis.	<ul> <li>What is the background of Diabetic</li> </ul>
		ketoacidosis? and their diagnostic criteria
		<ul> <li>Explain the pathophysiology Diabetic ketoacidosis and its final pathway</li> </ul>
		<ul> <li>Analyze the laboratory findings with their clinical presentation in patient with Diabetic ketoacidosis what do these findings provide us about the disease</li> </ul>
		<ul> <li>Assess the effective approaches and different treatments for Diabetic ketoacidosis based on guidelines</li> </ul>
		<ul> <li>present and discuss clinical scenario of Diabetic mellitus and try to focus on dosage form of insulin therapy</li> </ul>
		<ul> <li>design a comprehensive care plan for patient with Diabetic ketoacidosis from definition, etiology, clinical presentation, laboratory findings and treatment guidelines</li> </ul>
58	Endocrine  Congenital Adrenal	<ul> <li>What is the definition of congenital Adrenal hyperplasia?</li> </ul>
	hyperplasia	<ul> <li>Explain the pathophysiology congenital Adrenal hyperplasia and consequence of the defects in their pathway</li> </ul>
		<ul> <li>Explanation of diverge clinical presentations according to locus defect.</li> </ul>
		<ul> <li>Explain the types of congenital Adrenal hyperplasia and their pathophysiology</li> </ul>
		<ul> <li>Analyze the laboratory findings with their clinical presentation in patient with congenital Adrenal hyperplasia what do these findings provide us about the disease</li> </ul>
		<ul> <li>Assess the effective approaches and different treatments for congenital Adrenal hyperplasia based on guidelines</li> </ul>

		<ul> <li>present and discuss clinical scenario of congenital Adrenal hyperplasia and try to solve the problem practically</li> <li>design a comprehensive care plan for patient with congenital Adrenal hyperplasia from definition, etiology, clinical presentation, laboratory findings and treatment guidelines</li> </ul>
59	Cardiac	To define congenital heart diseases
	Acyanotic CHD PART 1	<ul> <li>To compare antenatal and post natal circulations</li> </ul>
		<ul> <li>To classify congenital heart diseases</li> </ul>
		<ul> <li>To make a diagnostic plan for congenital heart disease</li> </ul>
		<ul> <li>5. To describe the clinical characteristics of ASD and VSD</li> </ul>
60	Cardiac	To summarize AVSD and PDA
	Acyanotic CHD PART 2	<ul> <li>To compare between left obstructive and right obstructive lesions</li> <li>To understand the pathophysiology of Eisenmenger syndrome.</li> </ul>
61	Cardiac	To define Fallot tetralogy and TGA.
	Cyanotic CHD	<ul> <li>To make a management plan for TOF and TGA</li> </ul>
		To enumerate the complications of cyanotic CHD
62	Cardiac	To define Rheumatic fever
	Aquired heart diseases	To list RF diagnostic criteria
	MISCASCS	To make a managent plan for rheumatic fever.
		<ul> <li>To compare between different types of cardiomyopathies.</li> </ul>
63	Cardiac	To define HF
	Heart failure	To enumerate the causes of HF
		To make a plan for the diagnosis and management

		of HF.
64	Poisoning	<ul> <li>To describe diagnosis, complications &amp; treatment of Paracetol poisoning, Kerosene, caustic &amp; iron poisoning.</li> </ul>
65	Behavior	<ul> <li>To discuss causes, diagnosis &amp; treatment of Nocturnal enuresis, encopresis, breath holding spells &amp; pica</li> </ul>

# Syllabus of theoretical part of pediatrics / fifth stage

#### 1. Feeding of infants and children:

- Breast feeding: Colostrum, advantages of breast feeding, disadvantages of breast feeding, contraindications to breast feeding, physiology of breast feeding, Initiation, frequency and duration of breast feeding, determination of breast milk supply adequacy, supplementation of breast-feed baby, weaning from breast-feeding, common breast-feeding problems.
- Bottle feeding, Comparison of human milk, cow's milk and infant formula, types and properties of infant formulae, colic definition, etiology, differential diagnosis, prevention and treatment
- Problems of feeding during 1st year of life, definitions, types, causes, complications and management, topics include failure to thrive, marasmus and kwashiorkor

#### 2. Growth of children:

- Normal growth, growth charts, analysis of growth Pattern, other growth indices.
- Factors affecting growth and development.

#### 3. Development in children:

- Normal development of newborn, development in the 1st year of life
- Pattern of behavior from 1 5 years, and disorders of development, adolescence and puberty.
- Evaluating school readiness.

#### 4. Immunization:

- Schedule of vaccination in Iraq
- Passive Immunization, and immunoglobulin, contraindication of vaccination and special consideration.

#### 5. Respiratory system:

- Common cold, pharyngitis, tonsillitis
- Croup and epiglottis
- Bronchiolitis, pneumonias, cystic fibrosis
- Bronchial asthma
- Bronchial asthma and foreign body inhalation

#### 6. Neonatology:

- Neonatal terminology, neonatal examination and primitive reflexes.
- Neonatal resuscitation, routine Delivery Room Care, hypothermia, prematurity and intrauterine growth restriction, large for gestational age infants.
- Birth injury, neonatal seizure, hypoxic ischemic encephalopathy, intracranial hemorrhage.
- Infant of Diabetic mother, neonatal hypoglycemia, neonatal hypocalcemia.
- Respiratory distress syndrome and complication.
- Transient tachypnea of newborn, Meconium aspiration syndrome, Apnea of prematurity, congenital diaphragmatic hernia, tracheoesophageal fistula.
- Neonatal jaundice types and etiology, phototherapy, Exchange transfusion.

- Direct hyperbilirubinemia, causes, neonatal anemia, Neonatal polycythemia, coagulation disorders.
- Neonatal sepsis types and management, Necrotizing Enterocolitis.
- Congenital infection clinical manifestation and management .

#### 7. Gastroenterology:

- · Acute gastroenteritis in infancy and children
- Chronic diarrhea, etiology, management, celiac disease
- Colic. Gastroesophageal reflux (definition, types, clinical presentation, diagnosis, treatment
- Constipation in children.

#### 9. Cardiology:

- Introduction, etiology and epidemiology of congenital heart diseases, difference between fetal and neonatal circulations, congenital heart disease classification, A cyanotic heart disease, ASD, VSD, PDA, AV canal
- Obstructive lesions: Pulmonary stenosis, aortic stenosis, coarctation of aorta
- Cyanotic heart disease, TOF, TGA, effect of cyanotic C.H.D
- Acquired heart diseases, cardiomyopathy, types, clinical features and management, complications, Rheumatic fever, pathogenesis, clinical features, diagnosis, treatment, prevention
- Heart failure, causes, diagnosis, treatment

#### 10. Renal diseases:

 Urinary tract infections, upper and lower UTI etiology, presentation diagnosis and treatment

- Acute renal failure etiology presentation diagnosis, treatment and complications
- Glomerulonephritis, pathology, presentation, complications and treatment
- Nephrotic syndrome, etiology, pathophysiology, classification, presentation, diagnosis, treatment
- Henoch-Schönlein purpura and Hemolytic-Uremic Syndrome ,Urinary tract infection

#### 11. Endocrine System:

- Diabetes mellitus, etiology, clinical presentation, diagnosis, treatment, diabetic ketoacidosis
- Hypothyroidism etiology, clinical presentation, diagnosis, treatment
- Congenital Adrenal hyperplasia: clinical presentation, diagnosis, treatment

#### 12. Genetics

- Human genome project, DNA composition, types of genetic disorders, autosomal dominant disorders, examples
- Autosomal recessive inheritance, example of diseases
- X-linked recessive inheritance, rules examples, X-linked dominant inheritance, rules examples.
- Chromosomal abnormalities Down Syndrome, Edward Syndrome, Patau's syndrome, Turner Syndrome
- Multifactorial Inheritance, rules examples.

#### 13. Infectious Diseases:

- Common childhood rashes
- Meningitis & encephalitis

- Mumps, pertussis, diphtheria
- Polio, Infectious mononucleosis, Kala-azar

#### 14. Hematology:

- Anemia, classification, Iron deficiency anemia ,Anemia of inflammation and chronic diseases
- Congenital hypoplastic anemia and transient erythroblastopenia of childhood.
- Physiological anemia of infancy in full term and premature infant
- Megaloblastic anemia. B12 and Folic acid deficiency
- Hemolytic anemia's, Thalassemia, alpha thalassemia and beta thalassemia, hereditary spherocytosis
- G6PD deficiency, Sickle cell anemia, autoimmune hemolytic anemia, iso immune hemolytic anemia

#### 15. Oncology

- Epidemiology of pediatric cancer, predisposing factors, clinical presentation of malignancy
- Acute lymphoblastic leukemia, childhood lymphoma, non-Hodgkin lymphoma, Hodgkin disease, brain tumor, Wilms tumor, neuroblastoma

#### 16. Neurology:

- Congenital anomalies of CNS (Neural tube defects), macrocephaly, microcephaly, Hydrocephalus.
- Cerebral palsy, types, presentation, treatment
- Seizure in childhood, definition of epilepsy, classification of epileptic seizures, partial seizures, generalized seizures, Rolandic epilepsy,

absence, generalized tonic-clonic myoclonic epilepsy, infantile spasm, febrile convulsions, neonatal convulsions, status epilepticus.

- Neurocutaneous disorders: Neurofibromatosis, tuberous sclerosis, Sturge-Weber Syndrome.
- Floppy infant syndrome, etiology, classification according to EEG, Diseases of upper motor neuron lesions, diseases of spinal cord, spinal Muscular atrophy, Guillain Barrae syndrome, neuromuscular disease, myasthenia gravis, Neonatal myasthenia gravis, muscle diseases, Duchene muscular dystrophy, Juvenile dermatomyositis, metabolic myopathies.

#### 17. Poisoning

• Paracetamol poisoning, Kerosene, caustic & iron poisoning.

#### References

**Nelson textbook of pediatrics (2020)** 

**Essential of nelson textbook (2023)** 

#### Clinical part of pediatrics / Fifth stage

المهارات العمليه التي يتعلمها طالب المرحله الخامسه في فرع طب الأطفال

### Program outcomes and methods of teaching, learning and assessment of clinical part

• Clinical objectives.

Proper history taking and organized clinical Examination of children

- Skills objectives of the program: which includes
- Greeting the patient
- Introduction of student name and affiliation to the parents
- Asking permission to take history or examine the patient
- At the end of interview thanking the parents for their agreement to take history or examine the patient and wishing for improvement of the patient
- Emotional and Value Objectives:
- 1. Respect for the patient and his companions
- 2. Dealing gently with children
- 3. Good behavior with workers in the sites

#### Teaching and learning methods of clinical part

- Clinical training
- Preparation and presentation of cases

#### By:

- Attended pediatric hospitals
- Teaching small groups
- The participation of the student by adopting the method of discussion and, and motivating the student to discuss the clinical topic
- Each student has to practice case preparation including history and examination (Student-Based Teaching)
- Interactive clinical teaching in hospitals

#### Setting of clinical training of pediatrics fifth stage

#### **Duration:**

Number of training weeks for each group: Three weeks

72 hours/per each group

#### **Training location:**

Pediatric wards at Ibn Al-Atheer Hospital, Al-Khansa and Al-Salam Hospital

#### **Groups:**

Practical Training Curriculum: Dividing students into eight groups

#### Course:

During the clinical course, students will receive the following training:

- Communication skills
- History taking
- Growth parameter examination
- Examination of different systems of the child body

#### **Clinical objectives:**

At the end of the training period, the student should be able to:

- Practice of Communication skills
- Taking the medical history in an orderly, sequential and comprehensive manner so that it can be analyzed to reach to a scientific provisional diagnosis and differential diagnoses
- To practice the clinical examination in an academic, orderly and organized manner, and to know how to present the results of the clinical examination and their significance

#### **Assessment methods**

 Clinical exams in hospital at the end of three week of the clinical course

Clinical (end of the training period) long case: (10) marks

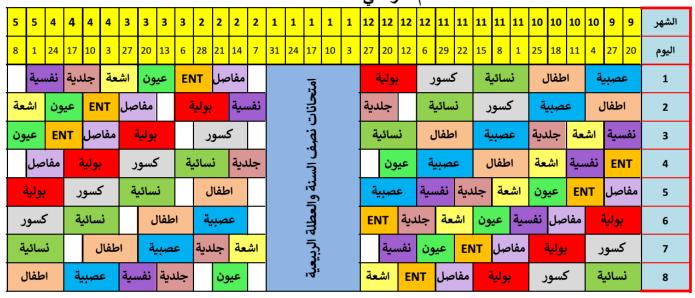
A standardized evaluation form is approved by all members of the pediatric department and announced on the bulletin board (attached at the end of the document)

#### Pediatrics course units / fifth stage

Pediatrics course units / fifth stage					
subjects	clinical	Theory	Number		
	teaching hours	teaching hours	of units		
Pediatrics	30 hours	65 hours	6 units		

#### جامعة نينوى \ كلية الطب

#### جدول التدريب السريري لطلبة المرحلة الخامسة للعام الدراسي ٢٠٢٣ - ٢٠٢٤



#### Assessment marks / fifth stage

Assessment marks / fifth stage				
Annual quest	Mid-year ( theoretical)	Final year ( theoretical)	100	
10 Marks	20 Marks 70 Marks			
Clinical	nical MCQ MCQ			
(at the end of the three weeks of clinical training)	Categorized according to a blue print	Categorized according to a blue print		
10 20		70	100	

# Curriculum of Pediatrics Faculty of medicine/ Ninevah University Sixth stage

#### المهارات ومخرجات التعلم الى يتعلمها طالب المرحله السادسه في فرع طب الأطفال

#### Program outcomes and teaching and learning methods

#### 1- Cognitive objectives.

- Knowing the most important symptoms and signs of common diseases in children
- Knowing the most important laboratory tests
- Knowing the most important treatments used in children
- Knowing the correct ways to resuscitate the child

#### 2- Skills objectives of the course

- Social communication skills
- Taking history from the child's parents correctly and clinical reasoning
- Dealing with emergencies for children( basic life support skills in skill lab)

#### 3- Assessment methods

- Theatrical exams
- Slide exams
- Daily evaluation
- Clinical exam in hospital

#### 4- Teaching and learning methods

- Interactive Clinical Teaching in hospital wards and Emergency departments
- Teaching small groups
- Student seminars
- Case Preparation (Certified Teaching)
- Skills Lab

#### 5- Assessment methods

- Theoretical exams in attendance
- Exams in the hospital (long and short cases)
- Slide exams
- Oral exams
- Daily evaluation
- Student activity and presentation
- Assessment in primary health care center

#### 6- Emotional and Value Objectives:

- Respect for the patient and his companions
- Dealing gently with children
- Not to cause harm to the patient
- Not to be condescending to the patient
- Good behavior with workers in the sites

### 7- General and rehabilitative skills transferred (other skills with employability and personal development).

- Speaking and information-taking skills
- Medical etiquette skills
- The skills of focusing and not deviating from the main topic
- Skills of dealing with children

#### 8- Personal development planning

- Planning to activate the student's role in preparing the study material and training after the end of cessions
- The ability to learn for life and search for the latest information

#### **Pediatrics teaching curriculum**

#### Sixth stage

Pediatrics department / College of Medicine/ Ninevah University

Clinical Training Curriculum for Sixth Grade Students for the Academic Year 2022-2023

**Teaching designs for sixth class** 

Clinical teaching: combination of

- Interactive teaching
- Case based learning
- Field exercise

#### **Teaching methods:**

- Clinical teaching in hospital words
- Field teaching in specialized centers (oncology, dialysis, thalassemia centers)
- Teaching in Emergency units
- Teaching in Premature care units
- Seminars

#### **Settings:**

- 1. Duration of student training: eleven weeks.
- 2. Students will be trained at Al-Salam Teaching Hospital, Ibn Al-Atheer Hospital, Ibn Sina Hospital and al khansa Hospital
- 3. Students attend the Thalassemia Center / Ibn Al-Atheer Hospital for one day during the training period.
- 4. Students attend the dialysis unit / Ibn Sina Hospital for two days during the training period.

- 5. Students attend the Oncology Unit / Ibn Al-Atheer Hospital for one day during the training period
- 6. Students attend the emergency words for two days during the training period to learn the diagnosis, assessment and treatment of important emergency cases, under the supervision of the teachers.
- 7. Students attend Al Quds primary care centers for 5 days during the course
- 8. Students attend the skills lab for one day during the training period to learn how to do basic life support for the child.
- 9. The student is given a number of important topics in the discussion sessions (Tutorials), according to what is attached to the curriculum.
- 10. Students are required to prepare and achieve daily practical training objectives (a copy of the objectives is attached to the curriculum).
- 11. The student is advised to know and follow up the cases of patients entering the hospital halls and to provide a list of those cases to the teacher in each teaching session.
- 12. The student is advised to continue clinical training in the words after the end of the teaching session and is responsible for everything related to pediatrics even if it is not discussed or given in the lecture by reviewing the sources.
- 13. The student must submit at least four cases during the training period and then submit an Approach report on the best way to diagnose and treat the presented case.
- 14. The student must attend a clinical case daily, even if it is not presented, and participating actively.
- 15. The student must present a seminar on a pediatric topic under supervision of a supervisor
- 16. The exam shall be in the last week of the training period

#### Assessment marks for pediatrics examinations in sixth stage

A. The degree of annual pursuit (20 marks)

Which is the degree of the clinical examination at the end of each elevenweek period of clinical training.

- B. The score of the theoretical exam at the end of the academic year (40 marks)
- C. Clinical exam score at the end of the academic year (40 marks)

A. The assessment of the degree of annual quest **(20)** shall be as follows: It consists of:

 Three theoretical MCQ examination based on problem solving pattern (8 marks)

First theoretical MCQ examination: 2 marks

Second theoretical MCQ examination; 2 marks

Third theoretical MCQ examination: 4 marks

2. Long case station: long case examination

(The student is given a period of 45 minutes to complete the case) and is tested for a quarter of an hour. (**7 marks**)

The communication skills and attitude of the student are valued at each clinical station, and the student is given 10% of the grade for these skills.

- 3. Ten stations, **slides (2 marks)** of ten minutes duration, consisting of ten slides. The stations include the following topics
  - Spot diagnosis slides (

- o ECG slides.
- CXR slides.
- Poisoning slides
- Fluid therapy slides
- o Emergency drugs slides.
- o Life support question slides.
- Tutorials subject slide
- 4. Examination on topics given in **primary health** care center (1 mark)
- 5. Seminar (1 mark)
- 6. Satisfied **Log book** requirements (1 mark)
- B. Theoretical exam at the end of the year: 40 marks, including 100% of the questions are in the form of cases to solve dilemmas, and are in the form of single -choice questions according to blue print
- C. A practical exam at the end of the year for the sixth stage : **40 marks**, including the OSCE exam, in which communication skills and practical skills in pediatrics are covered.

It includes twelve stations

- 1. Slide stations: (**20 marks**) the duration of the exam is around 30 minutes for all students
- 1. Spot diagnosis slides (clinical slides)
- 2. EEG slides
- 3. CXR slides.

- 4. Poisoning slides
- 5. Fluid therapy
- 6. Drugs slides.
- 7. Life support question slides.
- 8. Tutorial subjects
- 9. Laboratory slides
- 10. Instruments, devices, drugs and fluids slides

This exam is conducted after the final theoretical exam in the college halls

- Clinical history station (10 marks)
- Clinical examination station (**short case**s) (**10 marks**) of 10 minutes per student
- In summary :
  - Annual quest 20 Marks
  - End of the Year (Theoretical) 40 Marks
  - End of Year Exam (Practical) 40 Marks

# جامعة نينوى ١ كلية الطب جدول التدريب السريري لطلبة المرحلة السادسة للعام الدراسي ٢٠٢٣ - ٢٠٢٤

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Assessment marks for pediatrics examinations in sixth stage				
Annual quest	End of the Year (Theoretical)	End of Year Exam (Practical) 40 Marks		
20 Marks	40 Marks	40 Marks		

# Objectives Of the clinical sessions

#### **Pediatrics**

#### Objectives of the clinical sessions

#### 1<sup>st</sup> session:

#### **Growth and development:**

Objectives:

By the end of this session the students should know:

- Accurate measurements of weight, length (height) and OFC.
- Plotting of these measurement on growth charts
- The types of growth charts and the meaning of centiles.
- Definition of growth abnormalities using growth charts
- (FTT,marasmus,kwashiorkor,short stature)
- Normal developmental mile stones assessment by history and examination
- (Gross motor, fine motor and vision, language and hearing, social and adaptive)
- Students should practice the learned data in front of examiner.
- Prepare cases with growth and development abnormality for the next session

#### 2<sup>nd</sup> session:

#### **Growth and development:**

Discussion of a case with failure to thrive

Objectives:

By the end of this session the students should:

- Know the importance of history in patient with FTT regarding: previous growth parameter including birth growth parameter, feeding history, systemic review and social history)
- Practice accurate plotting of growth parameters of patient with FTT ,marasmus and kwashirkor.
- Know definition of acute and chronic malnutrition (knowing the principle that weight decrease first then length and lastly OFC.)
- Know common causes of FTT(non organic and organic)
- Outline management of FTT.

Prepare neonatal cases for next session:

#### 3<sup>rd</sup> session:

#### **Neonatal history and examination:**

Objectives: practical assessment in neonatal unit:

By the end of this session the students should

- Know how to take proper neonatal history
- Know definition of full term ,premature, LBW
- Know a simple way of assessing gestational age
- Know the complications associated with prematurity, LBW, infant of diabetic mother
- Be aware to ask in history about risk factors of neonatal sepsis
- Know the signs suggestive of sepsis, hypoglycemia, RDS.
- Know primitive reflexes and their significance.

Prepare cases with neonatal jaundice for next session

#### 4th session:

Objectives: practical assessment of neonatal jaundice

By the end of this session the students should

- Know criteria of physiological jaundice
- Know criteria of pathological jaundice
- Know types of blood group incompatibility
- Know early signs of kernicturus
- Plot TSB level on the chart
- Know the mechanism of phototherapy ,precautions, complications
- Know preparation, procedure, indication, complication of exchange transfusion
- Analysis of student cases with neonatal jaundice

Prepare cases with gastroenteritis (G. E) for next session

#### 5<sup>th</sup> session:

Objectives: practical assessment of patient with G.E

Presentation of case with G.E

By the end of this session the students should

- Know how to asses degree of dehydration
- Know types of dehydration
- Know the indications of admission to hospital
- Know definition of acute G.E.
- Know definition of chronic G.E
- Know causes of bloody diarrhea
- Differentiate viral versus bacterial and parasitic causes
- Differentiate small versus large bowel pathology

Prepare cases with gastroenteritis for next session

#### 6<sup>th</sup> session:

Objectives: practical assessment of patient with G.E.

- Presentation and analysis of cases with G.E according to learned data
- Practical demonstration of cannula, scalp vein, types of fluid available in hospital
- Practical calculation of deficit according to severity of dehydration, maintenance fluid according to weight ,types of fluid used
- Practical calculation of drops needed per minute
- Demonstration of micro drip device
- Importance of frequent assessment of patient with dehydration ,asking about urine output
- Complication of G,E
- Causes of convulsion in cases with G.E and management
- Causes of abdominal distention in patient with G.E and management
   Prepare abdominal examination and cases with chronic diarrhea, cases with finding on abdominal examination

#### 7<sup>th</sup> sessions:

#### Respiratory system

Objectives: student presents a case with respiratory compliant.

By the end of this session the students should know:

- · Analysis of history of respiratory system
- Examination of respiratory system in children
- Importance of detecting signs of respiratory distress

End of session:

Prepare respiratory cases for analysis in next session.

#### 8<sup>th</sup> session:

- Analysis of respiratory cases
- Comments on asthma, bronchiolitis, pneumonia, FB, croup and whooping cough Prepare cardiac cases for analysis in next session

#### 9th session:

**CVS:** By the end of this session the students should:

- Know proper examination of CVS
- Know the description and analysis of mummers
- Know the signs of heart failure
- Know causes of cyanotic and a cyanotic congenital heart disease.

Prepare cardiac cases for analysis in next session.

#### 10<sup>th</sup> session:

- Analysis of cardiac cases
- Hints on Investigations in cardiac case (CXR in TOF,TGA)ECG,ECHO
- Comments on management of heart failure.

Prepare **hematological cases** for analysis next session (pallor)

#### 11th session:

By the end of this session, the students should know:

- Symptoms and signs of anemia.
- Historical clues in evaluation of anemia(age, nutrition, family history, drugs, infection and diarrhea)
- Physical finding in evaluation of anemia(jaundice,purpura, splenomegally, lymphadnopathy, glossitis, angular stomatitis and koilonichia)
- Investigations of anemia
- · Causes of anemia according to RBC morphology.
- Common causes of hemolytic anemia

(Hemoglobinopathies, membranopathies, enzymopathies and autoimmune cause)

 Management of anemia Prepare hematological cases with bleeding tendency (if available) for analysis in next session

#### 12th session:

#### **Bleeding tendency**

By the end of this session the students should know:

- Symptoms and signs of bleeding tendency
- Historical clues in evaluation of bleeding tendency
- Physical finding in evaluation of bleeding disorder (anemia, ,purpura, splenomegally, lymphadnopathy,heamarthrosis)
- Screening test for (Bleeding time, platelets, PT, APTT, TT)
- Common causes of bleeding disorder anemia (ITP,Leukemia,coagulation defect)
- Management of bleeding tendency

Prepare cases with fever for analysis next session

#### 13th session:

#### Infectious diseases

By the end of this session the students should know:

- How to measure temperature (site, normal value)
- Common causes of fever with localyzing signs

- Common causes of fever without localizing signs (sepsis, UTI)
- Definition of PUO, (causes and investigations)
- Differential diagnosis of fever and rash.
- Schedules of vaccination

Prepare cases with **fever** for analysis next session

#### 14<sup>th</sup> session:

By the end of this session the students should know:

- Analysis of case with fever according to leaned data
- Signs of meningeal irritation, (technique, indication and contraindication of CSF exam.)
- Symptoms and signs of sepsis (investigation)
- Symptoms and signs of common causes of PUO (typhoid,brucellosis,tb,rhuematological,malignant disease)

Prepare cases with diabetes mellitus (if available) for analysis next session

#### 15th session

By the end of this session the students should know:

- Laboratory definition of diabetes
- Manifestation of DKA
- Management of DKA
- Management of diabetes(insulin types)
- Complication of diabetes
- Loss of consciousness in of diabetes

Prepare neurological cases for analysis next session

#### 16th session

By the end of this session the students should know:

- Neurological history and examination
- Historical and examination clues in convulsion
- Signs of meningeal irratation
- Definition ,types, causes of cerebral palsy
- Normal and abnormal head size(definition and causes)

Prepare neurological cases for analysis next session

#### 17th session:

By the end of this session the students should know:

- Assessment of patient with convulsion.
- Definition of febrile convulsion

Definition and types of epilepsy

Prepare renal cases for analysis next session

#### 18<sup>th</sup> session:

By the end of this session the students should know:

Definition, causes and management of acute renal failure

Definition, causes and management of chronic renal failure

#### 19<sup>th</sup> session:

By the end of this session the students should know:

Definition, causes, complications and management of **nephrotic syndrome** 

Definition, causes complications and management of glomerulonephritis

Diagnosis and treatment of UTI.

#### 20th session:

Objective: Practical management of critically ill child.

Setting: In emergency ward.

By the end of this session the students should know:

Management of severely dehydrated child. Reevaluation after rehydration. Subsequent fluid or ORS therapy. Type of used fluid and how many drop per minute.

Management of the following conditions if available:

Management of acute asthmatic attack. Oxygen flow rate. Ventolin nebulization. Inhalers. Steroids.

Management of bronchiolitis, croup, and pneumonia .other respiratory distressed child.

Management of heart failure case

Management of convulsive attacks. Neonatal convulsion, febrile convulsion, epilepsy

Note: management means diagnosis and treatment.

#### 21<sup>st</sup> session:

Objective: Practical management of a child with thalassemia and sickle cell anemia:

Setting: In thalassemia ward.

By the end of this session the students should know:

The difference in clinical presentation of thalassemia and sickle cell anemia.

Interpretation of laboratory investigation of Hb variant test.

Indication of blood transfusion in both conditions

How to prepare blood for the patient. Observation of method of cross match.

What are the complication of blood transfusion by observing the patient during blood transfusion and learn how to treat them.

The infusion pump by which Desferal is given, also the student should see Desferal drug and Exjade.

During this cession there is also a visit to blood bank and a laboratory visit for watching HPLC device.

#### 22<sup>nd</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, and 25<sup>th</sup> sessions:

Assessing the skills of the students regarding history taking, examination, analysis and management of cases (simulating examination environment.)

#### 26th session onward:

Approaches and analysis the presenting signs and symptoms (long cases And short cases).

N.B: students should search for any case with dysmorphology during their training course to be discussed as a short case.

Our department welcomes any feedbacks which aim to enhance the teaching standards

Good training and good luck.

## Programmed curriculum for daily clinical training of pediatrics for sixth stage students

 The details of the curriculum, the list of objectives and the details of the Log book are explained to the students on the first day of the training by the branch head or the branch rapporteur.

#### The first six weeks of training:

This period is concerned with systematic training according to the objectives set by the Pediatrics department, which covers most of the important practical topics in the subject of Pediatrics (a list of objectives, attached to the daily curriculum).

#### From 8-9 AM: Prepare cases.

- Each student attends a daily a clinical case related to the goals to be discussed on that day.
- The representative of the student group is responsible for providing the teacher with a list of the cases prepared daily by the students to be selected according to the importance of the cases.
- One of the students (alternately) is responsible for preparing a list of all the cases in the hospital daily and submitting it to the teacher to be selected according to the importance of the cases to be discussed. Important cases are discussed after the discussion of the target topic is completed

#### From 9-10 AM: Discuss the proven goals for each training day

- Clinical training goals for the entire training period are given to each student from the first day of training. The achievement of these goals is considered the minimum requirements to be achieved by the student
- The student is required to prepare the daily goals a day before (to stimulate self-directed learning) to discuss them from a practical point of view with the teacher through questions and answers and to remove any ambiguity or misunderstanding of the topic concerned with the goals
- The teacher gives a scenario of traditional examples and examples that need solving clinical problems related to the objective topic and asks the students to interact and participate in solving them to know the extent of the students' strategic intellectual nutrition

Reiterating the necessity and importance of graduating a safe doctor

#### From 10 -12 AM: submitting cases

- A number of students present the cases chosen by the faculty tutor and students and are discussed in detail with the students
- Encourages students to participate and debate based on evidence, raise
  questions and try to answer them from students to know their information and
  their way of thinking.
- The student submits an APPROACH TO A CASE report for the case he submitted, which must include:
  - The important points that should be focused on in the history of the disease for such a case and the reasons for that importance
  - Important clinical signs that should be checked in such a case
  - How to diagnose and differential diagnosis, choose the necessary tests and write the main lines of treatment
- The report is presented to the teacher in the next session to be fixed and
  discussed with the group. To establish the correct information, modify and correct
  the wrong information, and to document what the student has learned in the
  previous practical lesson, and to reflect the extent to which the student has been
  scientifically nourished in the target topic.
- The student presented to the case shall be responsible for following up his
  patient until he leaves the hospital, and informing the teaching staff and the
  group of important diagnostic and therapeutic changes, improvement or
  emerging complications.
- Students are asked to share the APPROACHES with their colleagues so that at the end of the training period each group has reports on all the topics discussed.

#### **From 12-3 AM**

 Students visit the hospital wards, especially the emergency ward, to learn and observe the work of the regular and senior residents and how to receive and treat patients, especially emergency cases.

#### The remaining five weeks of training:

This period is concerned with systematic training according to the cases chosen by the students to be discussed

#### From 8-9 AM: Prepare cases.

- Each student presents a medical condition of practical importance in terms of symptoms or clinical signs, or of diagnostic or therapeutic importance
- The representative of the student group is responsible for providing a list of cases prepared for the teacher to be selected according to the importance of the cases.
- One of the students (alternately) is responsible for preparing a list of the cases in the hospital daily and submitting it to the teacher to be selected according to the importance of the cases to be discussed. In order for students not to miss important cases, even if they were not prepared

#### From 9-12 AM: submitting cases

- A number of students present the cases chosen by the teacher or students and are discussed in detail with the students
- Encourages students to participate, constructive criticism, and questions
- How the practical exam is represented on some cases, how the model answer and the method of calculating grades are represented
- The student submits an APPROACH TO A CASE report for the case he submitted, which must include:
  - The important points that should be focused on in the history of the disease for such a case and the reasons for that importance
  - · Important clinical signs that should be checked in such a case
  - How to diagnose and differential diagnosis, choose the necessary tests and write the main lines of treatment
- The report is presented to the teacher in the next session to be fixed and discussed with the group. To establish the correct information, modify and correct the wrong information, and to document what the student has learned in the previous practical lesson, and to reflect the extent to which the student has been scientifically nourished in the target topic.

• Students are asked to share the APPROACHES with their colleagues so that at the end of the training period each group has reports on all the topics discussed.

#### From 12-3 AM

Students visit the hospital wards, especially the emergency ward, to learn and observe the work of the regular and senior residents and how to receive and treat patients, especially emergency cases.

#### Skills Lab

Students attend one day in the sixth week of the training period in the skills laboratory for training in the ideal methods of basic and advanced life support for the critically ill child and the rescue of the child choking with a foreign body. Students practice first aid methods on manikins

#### **Specialized Units**

Students attend the following specialized units to achieve the desired goals in the list of Objectives

- Students attend two days of training in the **preterm unit**
- Students attend two days of training in the emergency unit
- Students attend one day of the training period in the Oncology Unit
- Students attend one day of the training period in the **Thalassemia Unit**
- Students attend two days of training in the **nephrology unit**

#### **TUTORIALS**

A number of important topics are chosen that need training and practice

It is given either in the skills lab, for example, training in basic and advanced life support which is applied to special manikins

Or in the halls for topics that need a special presentation, for example, the presentation of radiographs or slides and the topic of poisoning

Or in the emergency ward for the issue of emergency medicines

Tutor name and topic to be discused are as follow

1. Dr. Khalil Ibrahim: Pediatric life support

2. Dr. Musaab mazin: Emergency drug therapy

3. Dr. Ahmed Khalil: Pediatric slides

4. Dr. Aseel sami: Poisoning in pediatrics

5. Dr. Ali Adel: X-rays films

6. Dr. Bashar Shaker: Pediatric ECG

7. Dr. Yusra Ahmed : Anemia, bleeding tendency and components of blood product

8. Dr. Yusra Ahmed: Anemia: laboratory investigation

9. Dr. Iman Essam : Fluid therapy

# Assessment papers

## جامعة نينوى - كلية طب نينوى

## Long case assessment (6th year)

\*Score is out of 100 for each student

No	Student name	Com Skills, attitude and behavior	History is presented in chronological way	History items covered and analyzed well	Asking about and analyzing specific items well	Examination by describing finding and /or technique in proper way	Discussion	Total
		10	10	10	10	30	30	100
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

تصمیم: د. خلیل ابراهیم

Examiner (1) Examiner (2)

## جامعة نينوى – كلية طب نينوى

## Station assessment (examination) (6th year)

#### \*Score is out of 100 for each student

No	Student name	Com Skills,	Technique of	Detecting	Simple	Total
		attitude and	examination	and	Discussion	
		behavior		describing		
		10	00	findings 30	00	400
		10	30	30	30	100
1						
2						
3						
4						
5						
6						
7						
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16						
17						
18						
19						
20						

تصمیم: د. خلیل ابراهیم

## جامعة نينوى – كلية طب نينوى

## Long case assessment (5th year)

#### \*Score is out of 100 for each student

10     20     20     25     25     100       1     10     10     10     10     10     10     11     12     13     14     15     16     17     18     19     10     11     12     13     14     15     16     17     18     19     10 <t< th=""><th></th><th>No</th><th>Student name</th><th>Com Skills, attitude and behavior</th><th>History items covered and analyzed well</th><th>Asking about and analyzing specific items well</th><th>Proper examination technique</th><th>Detecting and describing findings well</th><th>Total</th></t<>		No	Student name	Com Skills, attitude and behavior	History items covered and analyzed well	Asking about and analyzing specific items well	Proper examination technique	Detecting and describing findings well	Total
2         3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19				10	20	20	25	25	100
3         4         5         6         7         8         9         10         11         12         13         14         15         16         17         18         19		1							
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تصمیم: د. خلیل ابراهیم

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## Student's Log Book

# Sixth Year Paediatric Course

## **Student's Log Book**

#### Sixth Year Paediatric Course

### Paediatric Department Ninevah College of Medicine Ninevah University

2023-2024

#### Student's name:

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Student picture	

## The logbook Objectives

- To guide the trainee to the minimum procedures required to be a competent doctor.
- To help in the assessment of the trainee.

#### **About the logbook:**

- The student should take the logbooks with them during their training programs.
- The procedures learned during the courses (observed or performed) should be recorded in the logbook.
- Learned procedures other than those mentioned in the logbook can also be recorded.
- The tutor is asked to sign for the procedures documented by the student.

#### **Dear student:**

At the end of this 10 weeks clinical course you should be familiar with the common conditions affecting children, and have a working knowledge how to approach and examine a sick child, plan investigations and organise management.

#### How to use this logbook:

The logbook provides details of the various placements that make up the clinical attachment in Paediatrics, it is extremely important that you utilise your time appropriately during the attachment, and you are strongly advised to spend a significant proportion of your time seeing patients on the wards, in outpatients and emergency department. Do not rely solely on tutorials and, at your level and maturity, it is unacceptable to expect to be completely spoon fed. The logbook contains attendance forms for the various placements that need to be signed by the tutor running each particular placement. Tutors will not provide signatures 'in retrospect'. Although you should strive to cover as much clinical material as possible, we appreciate that this is difficult and have provided a list of important topics and appropriate forms to document these cases. Every student is expected to discuss and present at least four clinical cases to their colleagues and a tutor and this should be documented in the appropriate form.

The logbook is designed to help the student and, as such, should provide a framework around which to plan your attachment in Paediatrics. It will need to be handed in for assessment at the end of the course. Although the logbook will not contribute directly toward the final examinations in Paediatrics, the standard rule is that you cannot enter the clinical course examination and final clinical examination in paediatrics if you have 10% unexcused absence days or 15% excused absence days in this course.

- Form 1: Attendance at discussion of objectives and on ward rounds
- Form 2: Attendance at Tutorials
- Form 3: Attendance in Paediatric emergency unit, neonatal care unit and other units.
- Form 4: Recommended, learned, and observed skills
- Form 5: Details of **four** case reports
- Form 6: Attendance at primary health centre.
- Form 7: Attendance at skill laboratory
- Form 8: List of Students in the group

#### Prof. Dr . Nashwan Al Hafidh Head of Paediatrics division

Tutors in paediatrics in this year:

- 1. Dr. Nashwan Al hafidh: Professor
- 2. Dr. Yusra Ahmed: Assistant Professor
- 3. Dr.Bashar Shaker: Assistant Professor
- 4. Dr.Khalel Ibrahem: Assistant Professor
- 5. Dr.Ali Adel: Lecturer
- 6. Dr.Assel Sami: Lecturer
- 7. Dr.Eman Isam: Lecturer
- 8. Dr.Ahmed khalel: Lecturer
- 9. Dr. Musa'ab Mazin: Lecturer

#### Form 1: Attendance at discussion of objectives and on ward rounds

## An objective takes any format including history, examination of paediatric patients and approach to patients according to registered topics.

No	Date	Objective Title	Prepared case	Tutor name	Tutor signature		
1	/	Growth and development					
2	/	Growth and development					
3	/	Neonatology					
4	/	Neonatal jaundice					
5	/	Gastro-enteritis					
6	/	Gastro-enteritis					
7	/	Respiratory system					
8	/	Respiratory cases					
9	/	Cardiovascular system					
10	/	Cardiac cases					
11	/	Anemia					
12	/	Bleeding tendency					
13	/	Fever and infectious diseases					
14	/	Cases of feverish child					
15	/	Diabetes and D.K.A					
16	/	Nervous system					
17	/	Neurological cases					
18	/	Renal failure					
19	/	Nephrological cases					
20	/	Critically ill child					
22	/	Thalassemia and sickle cell An					
23	/	Review and assessment					
24	/	Review and assessment					
25	/	Review and assessment					
26	/	Review and assessment					
27	/	Review and assessment					

28	/	Review and assessment
29	/	Review and assessment
30	/	Review and assessment

#### Form 2: Attendance at Tutorials

Sixth year students in their paediatrics course will have a tutorial sessions in paediatrics

	Tutor	Tutorial – title	Tutor
			Signature
1.	د بشار شاکر	PEDIATRIC ECG	
2.	د.احمد خلیل	PEDIATRIC SLIDES	
3.	د.علي عادل	X RAY SLIDES IN PEDIATICS	
4.	د اسيل سامي	POISONING IN PEDIATICS	
5.	د.مصعب مازن	PEDITRIC EMMERGENCY AND EMERGENCY DRUGS	
6.	د.ایمان عصام	FLUID THERAPY IN PEDIATRICS	
7.	د.خلیل ابراهیم	PEDIATRIC LIFE SUPPORT	
8.	د پسری احمد	ANEMIA AND BLEEDING DISORDERS	
9.	د پیسری احمد	Laboratory investigation	

Form 3: Attendance in paediatric emergency unit, neonatal care unit and other units.

Notes:	Attendance in these areas is advised with a MINIMUM attendance frequency
	as outlined below.

Date	Event	Tutor	Tutor signature
	Paediatric emergency unit (2hours)		
	Neonatal care unit (2 hours)		
	Neonatal care unit (2 hours)		
	Paediatric oncology session (2 hours)		
	Thalassemia canter (2 hours)		
	Dialysis unit (2 hours)		
	Dialysis unit (2 hours)		

Form 4: Recommended learned and observed skills

Notes: Attendance, observation and learning of these skills are strongly recommended.

Date	Event	Tutor	Tutor Signature
Learn	ed skills		
1.	Anthropometric measurement (Weight, stature, OFC) (During objective 1 and 2)		
2.	Plotting of growth parameters on charts (During objective 1 and 2)		
3.	TSB Measurement + plotting on charts (During objective 4)		
4.	Incubators and phototherapy technique (During objective 3 and 4)		
5.	Fluid therapy (During objective 6)		
6.	Oxygen therapy and nebulization (During objective 7 and 8)		
7.	Paediatric resuscitation (During Pediatric life support tutorial)		
8.	Others		
9.			
10.			
	ved skills		
At an	y chance during your course		
1.	Taking blood from a child		
2.	Venous cannulation		
3.	Lumbar puncture		
4.	Septic screen (blood culture, urine culture, CSF culture)		
5.	Others (like bone marrow exam, exchange transfusion, etc.)		
6.			
7.			
8.			

Form 5: Details of <u>four</u> case reports: Full case presentation and analytic approach should be attached.

تاريخ الدخول	Hospital	اسم المريض case 1	رقم الطبلة	Tutor	Signature
<b>Brief case</b>	report:				
تاريخ الدخول	Hospital	case اسم المريض	2	رقم	Tutor
الدخول				الطبلة	
D • 6	4				
Brief case	report:				
تاريخ	Hosnital	case اسم المريض	3	رقم	Tutor
الدخول	Hospitai	Case		الطبلة	Tutoi
Brief case	report:				

تاريخ الدخول	Hospital	case 4 اسم المريض	رقم الطبلة	Tutor
			الطبلة	
Brief case rep	ort:			

#### Form 6: Attendance at primary health centre.

Date	Training subject title	Tutor	Tutor Signature
1.	Management of dairrhea in children		
2.	Management of respiratory disorders in children		
3.	Vaccination		
4.	Examination		

#### Form 7: Attendance at skill laboratory

Date	objective – title	Tutor	<b>Tutor Signature</b>
	Basic paediatric life support		
	Paediatric life support after foreign body inhalation		

Group (

Form 8: List of Students in the group

Your frank feedback is required please: This course provided you with what percentages of what you need and expect

- 1. 80 -100 %
- 2. 50-79%
- 3. Less than 50%

Your opinion is essential for us Your opinion will not affect your mark Please add any comment, which you think it will improve your learning and our teaching. Thanks

Ninevah University College of medicine Prof. Dr. Nashwan Al-Hafidh Head of Pediatrics department