

University of Diyala
College of Medicine
Dept. of Pediatrics



Schedule of Curriculum

Subject: Pediatrics

Year: 5th, 1st course

Weeks of the course:15

Theory hours:30

Practical hour:45

Units of teaching: 3.5

Week	Theory	Objectives	hrs	Practical	Objectives	hrs
1 st	Growth, development, and Nutrition	1. Concept of Growth & Development 2. Assess and measure growth accurately 3. Determine the formation & eruption of teeth 4. Plot & interpret growth charts 5. Assess different stages of normal developmental milestones 6. Determine the Pattern of growth 7- Describe periods of growth 8- Describe the factors which affect the Growth 9- Describe the types infant feeding 10- Advantages of breast feeding 11- Contra-indications of breast feeding 12- How to prepare bottle feed ?	2	History taking	- Training about approaches to child patients and their families. - Outlines the items of history taking. - Identify the points that characterize history taking in pediatrics.	3
2 nd	Malnutrition	1- Overview of Nutritional Requirements 2- Use the history & physical exam. to evaluate nutritional status. 3- Identify etiologic categories of malnutrition, 1ry, 2ry, 4- Present an approach to recognizing & treating some common nutritional problem of childhood. 5- Display an understanding of the principles for managing severe childhood under nutrition. 6- Definition of Malnutrition 7- Explain the Causes of Malnutrition 8- Measurement and Types of Malnutrition (marasmus and kwashiorkor) 9- Mild/Moderate Malnutrition (Underweight and Stunting)	2	History taking	- Practicing the whole history taking upon child patients admitted to hospital by each student separately . - Present the history in front of other students for discussion and correction of mistakes.	3

		10- Identify the Nutritional Deficiencies (Iodine & Fe. Vitamins –A,B,C,D,E,K) 11- Outline management of Severe Malnutrition				
3 rd	Genetics	1- define the basic of human genetics. 2- describe the basic & types of inherited diseases. 3- identify the most common types of genetic aberrations in human being.	2	History taking	- Try to accommodate history taking according to the clinical conditions. - Concentrate on positive and negative relevant findings.	3
4 th	Immunization	- Differentiate between(Live vaccines, Attenuated live vaccines, Inactivated (killed vaccines) - Identify Types of vaccines. - Discuss Route of administration - Education & counseling for child, parents. - Discuss the benefits of immunization programs. - Communicate to patients and parents about vaccine benefits and risks - Conduct an effective plan of management for children regarding immunization - List possible complications of immunization - Diagnose potentially lethal anaphylaxis and initiate immediate treatment	2	General Exam.	- Training about approaches to child patients and their families. - Training about how to examine a child without interfering or crying him. - Reviewing the case sheets of the general examination and adding of parts specific for pediatrics including growth parameters.	3
5 th	Infectious - Typhoid. - Kala-azar. - Brucellosis. - Chickenpox - Measles, - Rubella	- Determine the IP & possible route of communication. - Outline measures of prevention - Identify the presenting features of the infection - Determine the immunization status of the infants/children. - Determine Hx of contacts, travel, farm visits, ingestion of un-pasteurized milk or undercooked meat, source of water supply. - Elicit a Hx of the pregnancy & delivery, maternal Hx of fever, rash, flu-like illness, litter, etc.(Rubella) - List & interpret clinical & lab. findings which were key in the processes of exclusion,DDx & Dx: - Describe rapid viral testing, stool tests, & viral serology. - Define Outline treatment of (Typhoid, Kala-azar,	2	General Exam.	- Practicing the general examination by each student separately upon child admitted to hospital. - Each student must present his finding in front of others.	3

		Brucellosis, „Chicken pox, Measles, Rubella.) - Enumerate complications of each disease.				
6 th	Infectious - mumps. - pertussis - scarlet fever - Roseola.	- Determine the IP & possible route of communication - Outline measures of prevention to contain the spread of communicable disease. - Identify the presenting features of the infection. - Determine the immunization status of the infants/children. - Determine Hx of contacts. - Determine complications and prognosis of infectious diseases - List & interpret clinical & lab. findings which were key in the processes of exclusion,DDx & Dx. - Conduct an initial plan of Mx for a pt with a childhood communicable diseases - Outline Mx of specific communicable diseases.	2	General Exam.	- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	3
7 th	Infectious - hepatitis A,B,C,D,E.	- Determine the IP & possible route of infection. - Outline measures of prevention of viral hepatitis. - Describe rapid viral testing for HAV, HBV,HCV,HDV,HEV) - Identify complications of viral hepatitis. - Identify the presenting features of the infection - Discuss specific treatment - Outline management - Conduct a counseling	2	Respiratory system	- Identify the anatomy and physiology/ patho-physiology. - Enumerate symptoms & signs of disease or problems may be developed regarding this system. - Concentrate on emergency conditions may arise in children regarding this system.	3
8 th	Neonatology	Identify the concept of NN sepsis -Describe the risk factors for NN sepsis -Explain the types of NN sepsis according to the onset -Identify the different etiologies -Discuss the clinical approach to NN sepsis -Describe the sepsis(infectious) screen - Outline the treatment	2	Respiratory system	- Doing scientific steps of examination in sequence, including inspection, palpation, percussion, and auscultation. - Detection of signs of the implicated diseases.	3
9 th	Neonatology	Define the concept Describe the pathophysiology of jaundice Identify the etiology of NN jaundice Describe the types of NN jaundice Identify the Risk factors of NN jaundice Describe the clinical approach to NN jaundice	2	Respiratory system	- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	3

		Outline the management of NN jaundice Explain the effects, Mechanism & complications of Phototherapy Enumerate the indications & complications of Exchange transfusion				
10 th	Neonatology	1-Definitions 2-Explain the Causes 3-What are the Problems encountered by LGA & SGA 4-outline management 5-Conduct a counseling & education program for caregivers of children with poor growth. 6-Conduct an ongoing program to monitor the progress of such children. 7-Appropriately utilize hospitalization, consultation with other health professionals & community resources	2	Abdominal examination	- Identify the anatomy and physiology/pathophysiology. - enumerate symptoms & signs of disease may develop in this system. - Concentrate on emergency conditions may arise in children regarding this system.	3
11 th	Neonatology	Fetal lung characteristics ,Causes and classification of cyanosis Identify the signs of Respiratory Distress , Describe the Evaluation and Investigation of Neonatal cyanosis General Management Differential diagnosis of Neonatal cyanosis RDS (Describe the pathophysiology, Risk factors, clinical findings, X ray findings, Outline Management. Prevention, Prognosis) Transient tachypnea of newborn(TTN) (Concept, Mechanism, Risk factors, clinical findings, X-ray findings, Outline Management) Meconium Aspiration Syndrome (Describe the epidemiology, clinical Features, X ray findings, management) Diaphragmatic Hernia (Identify the concept , Types , Describe the Clinical Features X ray findings, Outline the Management) Congenital pneumonia (explain the Pathophysiology, Identify the risk factors and common M.O. ,Describe Clinical findings, X ray findings, Outline Treatment.	2	Abdominal examination	- Doing scientific steps of examination in sequence, including inspection, palpation, percussion, and auscultation. - Detection of signs of the implicated diseases. - Diagnose and solve the problems	3
12 th	Poisoning	1- Identify the risks and risk factors for poisoning in children.	2	Abdominal examination	- Concentrate on positive and negative relevant clinical findings.	3

		2- Describe the clinical presentation of the important common poisoning in children. 3- Outlines the most important steps of management of poisoning.			- Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	
13 th	Respiratory system	Pneumonia (Definition ,etiology ,to assess the predisposing factors for recurrent pneumonia, clinical manifestations ,to differentiate between viral &bacterial pneumonia& out line the management &its complications) Bronchiolitis (Definition, etiology , clinical manifestations ,to know the criteria for admission to hospital ,to outline management& prevention.	2	Revision	- Review history taking and general examination.	3
14 th	Respiratory system	Asthma(Definition, etiology , pathophysiology ,to classify asthma according to severity ,to assess risk factors of exacerbations ,to know the drugs used in the management of acute exacerbations &controller therapy)	2	Revision	- Review respiratory system and abdominal examination.	3
15 th	Respiratory system	Sore throat & strider(How to approach to a case presented with strider ,causes & management.	2	Revision	- Clinical assessment.	3

STUDENTS ASSESSMENT METHODS

Midcourse Examination: Written and Practical-

Final exam: written and practice

Distribution of marks: according to policy of the Department

Written Exams:

- Mid year exam: is a 2 hrs. exam.
- Final year exam: is a 3 hrs. exam.

Questions include:

- 1-MCQs.
- 2-Single choice questions.
- 3-Matching.
- 4-(Modified) Essay questions

- 5-Clinical cases
- 6- Data interpretation

- Total Practical: marks 40%
- Total Written: marks 60 %

TEACHING AND LEARNING METHODS

Teaching Aids:

- Power point presentation
- Smart board
- Video
- Pictures
- Clinical sessions: Real patients
- Skill lab
- etc ...

References:

- Nelson textbook of pediatrics
- Essential Nelson of pediatrics
- Forfar and Arneils textbook of pediatrics

DEPARTMENT TEACHING STAFF

1- Prof. Dr. Mehdi Shemkhi Jebr

mahdi@uodiyala.edu.iq

+964 7715979763

2- Prof. Dr. Jalil Ibrahim Kadhim Alezzi

jaleel@uodiyala.edu.iq

+964 7734132897

3- Prof. Dr. Najdat Shukur Mahmood

najdat@uodiyala.edu.iq

+964 7729719596

4- Assis. Prof. Aseel Jasim Mohammad

aseel@uodiyala.edu.iq

+964 7703999079

5- Lect. Hella Othman Habeeb

haila@uodiyala.edu.iq

+964 7717030120

6. Assis. Lect. Seif Hakeem Tawfiq
+964 7707273338



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Subject: Pediatrics

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Weeks of the course:15

Theory hours:30

Practical hours:45

Units of teaching: 3.5

Week	Theory	Objectives	hrs	Practical	Objectives	hrs
1 st	GIT	<p>Define chronic diarrhea as > 2 weeks in duration.</p> <p>-Differentiate small bowel & large bowel diarrhea</p> <p>-Differentiate osmotic from secretory diarrhea, & maldigestion from Malabsorption</p> <p>-List & interpret clinical & lab. findings which were key in the processes of exclusion,DDx & Dx</p> <p>-Outline plan of management for patients with ch. diarrhea, including the prevention & treatment of related complications (e.g. pts with CD, pancreatic insufficiency, vitamin & mineral deficiencies.</p> <p>Diarrhea :</p> <p>1-Definition, Etiology& Mechanism of diarrhea & vomiting</p> <p>2-Assess the degree of dehydration &Electrolytes disturbance</p> <p>3-Differential Dx.</p> <p>4- Outline Management of diarrheal diseases</p> <p>5-Expected Complications & Prevention</p>	2	CVS examination	<p>- Identify the anatomy and physiology/ pathophysiology.</p> <p>- Enumerate symptoms & signs of disease may develop in this system.</p> <p>- Concentrate on emergency conditions may arise in children regarding this system.</p>	3
2 nd	GIT Pediatric surgery	<p>Dehydration & electrolytes changes:</p> <p>1- Determine the degree and type of dehydration/volume depletion,</p> <p>2- investigate possibility of electrolyte abnormalities (sodium/potassium/hydrogen ion concentration,)</p>	2	CVS examination	<p>- Doing scientific steps of examination in sequence, including inspection, palpation, percussion, and auscultation.</p> <p>- Detection of signs of the implicated diseases.</p> <p>- Diagnose and solve the problems</p>	3

		<p>3-Determine Types of Fluids used in Replacement 4-Discuss Fluid Therapy in Pediatric age group .</p> <p>Pediatric surgery: Select patients with abdominal pain(AP) who require emergency Tx. -Elicit clinical findings which are key to establish the most likely etiology of the pain -Differentiate acute from chronic pain & organic from functional -Interpret abdominal x-rays -Conduct an effective plan of Mx for a pt with AP -Determine which pts have significant liver dysfunction & its cause -Differentiate between the causes of jaundice -Describe the immunization status, past & Family Hx. -Discuss abnormal LFT in the context of the clinical presentation, & select pts requiring medical Mx. -Outline the epidemiology & natural Hx of viral hepatitis Differentiate between the causes of jaundice & determine if treatable; ask hepatitis risk ,about drugs factors - Describe complications related to the presence of liver .disease - Interpret clinical & lab. findings which were key in the processes of differentiation, & ,exclusion .diagnosis -List the indications for an abdominal U\S, spiral CT, .MRI, ERCP& PTC -Conduct an effective plan of Mx for a pt with jaundice and its causes including acute liver failure -Select pts in need of specialized care and/or in need .of urgent hospitalization</p>				
3 rd	Hematology: Anemia & iron deficiency anemia	Define anemia, describe the clinical approach of anemia in children, Discuss the clinical presentations, management & prevention of IDA.	2	CVS examination	<p>- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis.</p>	3

					- Outlines the laboratory and radiological tests to reach diagnosis.	
4 th	Hematology: - Thalassemia & G6PD deficiency - Bleeding disorders (hemophilia, von-Willebrand disease & ITP)	- Describe the prevalence, clinical presentations, management and follow-up of thalassemia and G6PD deficiency. - Detect common causes of bleeding tendency in children, describe the clinical presentations, management & prognosis of hemophilia, von-Willebrand disease & ITP	2	CVS examination	- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	3
5 th	Oncology: Leukemia & Lymphoma:	identify the prevalence, etiology & types of leukemia & lymphoma, describe the clinical presentations, management & prognosis of childhood leukemia & lymphoma.	2	Neurology examination	- Identify the anatomy and physiology/pathophysiology. - enumerate symptoms & signs of disease may develop in this system. - Concentrate on emergency conditions may arise in children regarding this system.	3
6 th	Nephrology: - Nephrotic syndrome: Acute post streptococcal glomerulonephritis, Hemolytic-uremic syndrome, Henoch-Schonlein purpura:	- Define nephrotic syndrome , describe types, etiology, pathophysiology, clinical presentations, complications, investigations, management & prognosis of nephrotic syndrome - Describe the definition, prevalence, etiology, pathophysiology, clinical presentations, complications, investigations, management & prognosis of acute post-streptococcal glomerulonephritis, Hemolytic-uremic syndrome & Henoch-Schonlein purpura.	2	Neurology examination	- Doing scientific steps of examination in sequence, including inspection, palpation, percussion, and auscultation. - Detection of signs of the implicated diseases. - Diagnose and solve the problems	3
7 th	Nephrology/ Urology UTI & Enuresis	Identify the concept, describe the prevalence, types, risk factors, clinical presentations, complications, investigations, management & prognosis of UTI & Enuresis.	2	Neurology examination	- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	3
8 th	Endocrinology Thyroid gland - hypo/ hyperthyroidism	- Identify causes - Elicit symptoms and signs - List and interpret clinical and laboratory findings - Expected Complications & Prevention - Identify dose of thyroxin and follow up of treatment - Determine whether the delay is global, isolated to speech/language or motor	2	Neurology examination	- Concentrate on positive and negative relevant clinical findings. - Interpretation of the clinical findings. - Outlines the differential diagnosis. - Outlines the laboratory and radiological tests to reach diagnosis.	3

		delay, includes abnormal social interaction - Outline the management				
9 th	Endocrinology - DM TYP1. - Diabetic Ketoacidosis (DKA)	- Clarify Different factors ,may contribute to type 1 diabetes - Identify signs and Symptoms of DM1 - Discuss diagnosis of DM1(blood test and urine test) - Education & counseling for child, parents about DM1and diet control - Determine the Complications - Outline of management to child with DM TYPE1 - Definition ,Etiology, Pathophysiology - Diagnostic Consideration Of DKA - How To Manage A ten Year old Child With DKA? - Describe Prevention & Prognosis Of DKA	2	Neonatal examination	- Definition of medical terms like preterm, fullterm, IUGR,etc. - Description of normal neonatal measures after birth. - identify of complication of birth process. - How to do resuscitation after birth and APGAR score	3
10 th	Cardiovascular system	CHD(classification of CHD..Cyanotic & A cyanotic heart lesions),to know the common types of a cyanotic (VSD,ASD,PDA types ,presentations ,diagnosis &management), to know the common types of Cyanotic (TOF,TGA, types ,presentations ,diagnosis &management)	2	Neonatal examination	Describe clinical approach to neonate and his/her mother Take proper neonatal history Perform complete neonatal examination	3
11 th	Cardiovascular system	Acquired heart disease(RF. Criteria for diagnosis ,to outline management &prevention) Infective endocarditis (etiology ,major and minor criteria of diagnosis ,management)	2	Neonatal examination	Describe gestational age assessment Explain clinical approach to neonate with hyperbilirubinemia Illicit primitive neonatal reflexes(Rooting, Sucking, Palmar. Plantar grasps, Moro reflex, Stepping, etc....)	3
12 th	Cardiovascular system - Neurology: seizure	- CVS 1- define heart failure and its pathophysiology. 2- enumerate the most common causes of HF. 3- perform management of HF. - seizure 1- Define seizure. 2- List causes of seizure in children. 3- Describe the specific types and characters of seizure in children.	2	Neonatal examination	Explain clinical approach to neonate with suspected neonatal sepsis Discuss different neonatal problems(Asphyxiated newborn, Apgar score,)Birth injuries (Caput succedaneum , Cephalhematoma , Bone fractures, Erbs palsy etc...)	3
13 th	Neurology	FC: 1- Diagnose FC.	2	Revision	- Review of CVS examination.	3

	<ul style="list-style-type: none"> - febrile convulsion - neonatal seizure - Status epilepticus 	<p>2- Evaluate febrile seizure.</p> <p>NS:</p> <ol style="list-style-type: none"> 1- Analyze why neonatal seizures are different? 2- List the types of neonatal seizure. 3- List the causes of neonatal seizure. 4- Observe certain types of Neonatal seizure. 5- Evaluate the neonatal seizure. <p>SE:</p> <ol style="list-style-type: none"> 1- Define status epilepticus 2- Determine the risks of Status Epilepticus. 3- Perform management of status epilepticus. 				
14 th	<p>Neurology</p> <ul style="list-style-type: none"> - AFP - cerebral palsy - Mental retardation: 	<p>AFP:</p> <ol style="list-style-type: none"> 1- Define AFP 2- Determine the clinical types of AFP. 3- List the causes of each type of AFP. 4- Describe the most common causes of AFP. 5- Perform management of AFP. <p>CP:</p> <ol style="list-style-type: none"> 1- Define CP. 2- List its causes and types. 3- Describe the most common types. 4- Perform management. <p>MR:</p> <ol style="list-style-type: none"> 1- Define MR. 2- What are the grades and causes of MR? 3- Evaluate the child with MR. 	2	Revision	- Review of Neurology examination.	3
15 th	Neurology CNS infections	<ol style="list-style-type: none"> 1- Define meningitis/ meningoencephalitis. 2- How to predict CNS infections? 3- Diagnose CNS infections. 4- Performing of CNS infection management. 5- Evaluate the patients for complications. 	2	Revision	- Review of Neonatal examination.	3

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 - 4-(Modified)Essay questions
 - 5-Clinical cases
 - 6- Data interpretation
- Total Practical: 40% marks.
 - Total Written: 60 % marks.

TEACHING AND LEARNING METHODS

Teaching Aids:

- Power point presentation
- Smart board
- Video
- Pictures
- Clinical sessions: real patients
- Skill lab
- etc ...

مخرجات التعلم :

- ١-الحصول على خريج متمكن وملم بأساسيات طب الاطفال
- ٢-يتحلى بالأمانة والصدق مع نفسه ومرضاه ولا يتجاوز حدود إمكانياته
- ٣-قادر على التواصل مع مرضاه(الاطفال) و اسرهم
- ٤-يتفاعل مع مجتمعه في القضاء على الامراض الشائعة والوبائية لدى الاطفال بالتوعية الصحية وكيفية الوقاية والمعالجات الاسعافية الممكنة وكذا تصحيح بعض المفاهيم الطبية الخاطئة لدى بعض شرائح المجتمع وخصوصا في موضوع التطعيمات (اللقاحات)
- ٥-يتقن التعامل مع من حوله من الكادر الصحي يجل ويحترم عالمهم وكبيرهم ويساعد ويأخذ بيد صغيرهم ومبتدئهم

References:

- 1-Nelson textbook of pediatricsLast edition
- 2-Essential Nelson of pediatrics..... Last edition
- 3-Forfar and Arneils textbook of pediatrics ...Last edition
- 4-Macleo s Clinical Examination..... Last Edition
- 5-Hutchisons Clinical Methods.....Last edition

6-History taking &Physical Examination of Pediatrics (given by the Department of Pediatrics).

DEPARTMENT TEACHING STAFF

1- Prof. Dr. Mehdi Shemkhi Jebr

mahdi@uodiyala.edu.iq

+964 7715979763

2- Prof. Dr. Jalil Ibrahim Kadhim Alezzi

jaleel@uodiyala.edu.iq

+964 7734132897

3- Prof. Dr. Najdat Shukur Mahmood

najdat@uodiyala.edu.iq

+964 7729719596

4- Assis. Prof. Aseel Jasim Mohammad

aseel@uodiyala.edu.iq

+964 7703999079

5- Lect. Hella Othman Habeeb

haila@uodiyala.edu.iq

+964 7717030120

6. Assis. Lect. Seif Hakeem Tawfiq

+964 7707273338