

**Republic of Yemen**  
**Ministry of Higher Education & Scientific Research**  
**Emirates International University**



**Faculty of Medicine and Health Science**

**Department of Clinical Pharmacy**

**Bachelor of Pharm D**

**Course Specification of Pediatric clerkship**

**Course No. (CR 602)**



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Prepared by:

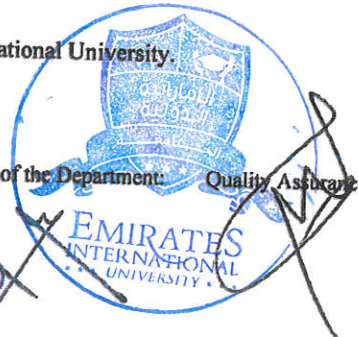
Dr. Ali Alyahawi

Reviewed by:

Head of the Department:

Quality Assurance head

Dean:



### I. Course Identification and General Information:

1	Course Title:	Pediatric clerkship		
2	Course Code & Number:	CR 602		
3	Credit Hours:	Credit Hours	Theory Hours	Lab/Training Hours
			Lecture	
		3	--	144 hours
4	Study Level/ Semester at which this Course is offered:	6 Level / 1 Semester		
5	Pre –Requisite (if any):	Pharmacotherapy I-V		
6	Co –Requisite (if any):	None		
7	Program (s) in which the Course is Offered:	Bachelor of Pharm D		
8	Language of Teaching the Course:	English		
9	Study System:	Semester based System		
10	Mode of Delivery:	Full Time		
11	Location of Teaching the Course:	Faculty of Medical sciences		
12	Prepared by:	Dr. Ali ALyahawi		
13	Date of Approval:			

### II. Course Description:

This course is directed toward training the students to deal with real cases in hospital so each student will spend two weeks participating in a variety of clinical activities related to Pediatric health care and will include rotations in inpatient Pediatric unit. Some of the activities done by students include: solving a case for treatment-related problems (TRPs), patient counseling, therapeutic drug monitoring, checking dosage regimen, checking drug interactions and assessing safety and efficacy of medications.

**III. Course Intended Learning Outcomes (CILOs) : (maximum 8)**  
Upon successful completion of the course, students will be able to:

**Referenced PILOs Learning out of program**

<b>A. Knowledge and Understanding:</b>		I, A or E	
a1	Identify the common pediatric disease states and the pharmacotherapist's role in optimize drug therapy in the clinical setting.	I	A5, A8, A10
<b>B. Intellectual Skills:</b>			
b1	Analyze the patient information on which to base safe and effective medication	E	B2, B7, B8, B9
<b>C. Professional and Practical Skills:</b>			

c1	Implement rational therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	A	C5, C8
c2	Participate in the medication reconciliation process at admission and discharge as needed to optimize patient outcomes.	A	C5, C8
<b>D. Transferable Skills:</b>			
d1	Share successfully in team-work and improve student skills of patients interview.	A	D1, D3
d2	Develop independent self-learning skills.	A	D4,D5

**(a) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1- Identify the common pediatric disease states and the pharmacist's role in optimize drug therapy in the clinical setting.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning -	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam

**(b) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1 Analyze the patient information on which to base safe and effective medication	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning	- Assignments - Oral case discussions during clinical rounds - Seminar - Pharmacy practice manual

	Group learning and Problem-based learning	<ul style="list-style-type: none"> <li>- Formal case presentation</li> <li>- Presentation for one of the course content topics.</li> <li>- Exam</li> </ul>
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**(c) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1 Implement rational therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning	<ul style="list-style-type: none"> <li>- Assignments</li> <li>- Oral case discussions during clinical rounds</li> <li>- Seminar</li> <li>- Pharmacy practice manual</li> <li>- Formal case presentation</li> <li>- Presentation for one of the course content topics.</li> <li>- Exam</li> </ul>
c2 Participate in the medication reconciliation process at admission and discharge as needed to optimize patient outcomes.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning	<ul style="list-style-type: none"> <li>- Assignments</li> <li>- Oral case discussions during clinical rounds</li> <li>- Seminar</li> <li>- Pharmacy practice manual</li> <li>- Formal case presentation</li> <li>- Presentation for one of the course content topics.</li> <li>- Exam</li> </ul>

**(d) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:**

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1 Share successfully in team-work and improve student skills of patient's interview.	Clinical cases studies Discussions & Small group discussions Seminars Training Self-learning Group learning and Problem-based learning	<ul style="list-style-type: none"> <li>- Assignments</li> <li>- Oral case discussions during clinical rounds</li> <li>- Seminar</li> <li>- Pharmacy practice manual</li> <li>- Formal case presentation</li> <li>- Presentation for one of the course content topics.</li> <li>- Exam</li> </ul>
d2 Develop independent self-learning skills.	Clinical cases studies Discussions & Small group discussions Seminars	<ul style="list-style-type: none"> <li>- Assignments</li> <li>- Oral case discussions during clinical rounds</li> <li>- Seminar</li> </ul>

	Training Self-learning Group learning and Problem-based learning	- Pharmacy practice manual - Formal case presentation - Presentation for one of the course content topics. - Exam
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### B. Case Studies and Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
1	<u>Pediatric unit</u> Vaccination Pediatrics growth charts Pneumonia in infants and children Hypertension in children Status epileptics. Type 1 diabetes mellitus in children. Hyperglycemic crisis Chronic kidney disease in children Meningitis in children Urinary tract infection in children Fever without focus Nephrotic syndrome Cystic fibrosis Gastroenteritis Vesicouretral reflux Neurogenic bladder Peritoneal dialysis. Peritonitis	Week 1-3	144	a 1, b1, c1, c2, d1, d2
<b>Number of Weeks /and Units Per Semester</b>		<b>3 weeks</b>	<b>144</b>	

### V. Teaching Strategies of the Course:

- Clinical cases studies
- Discussions & Small group discussions
- Seminars
- Training
- Self-learning
- Group learning and Problem-based learning



## VI. Assessment Methods of the Course:

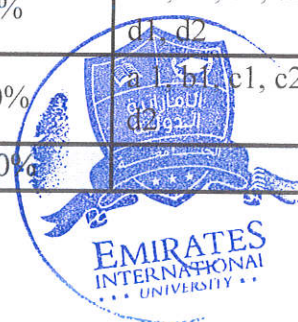
- Assignments
- Oral case discussions during clinical rounds
- Seminar
- Pharmacy practice manual
- Formal case presentation
- Presentation for one of the course content topics.
- Exam

## VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	<b>Assignment 1:</b> Develop a pharmaceutical care plan for selected case in pediatric diseases according to appropriate primary literature and updated guidelines.	a 1, b1, c1, c2, d1, d2	Week 1	5
2	<b>Assignment 2:</b> Develop a pharmaceutical care plan for selected case in pediatric disorders according to appropriate primary literature and updated guidelines.	a 1, b1, c1, c2, d1, d2	Wee 2	5
<b>Total</b>				10

## VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments	Weekly 1-2	10	10%	a 1, b1, c1, c2, d1, d2
2	Oral case discussions during clinical rounds	Weekly 1-2	10	10%	a 1, b1, c1, c2, d1, d2
3	Pharmacy practice manual	Weekly 1-2	15	15%	a 1, b1, c1, c2, d2
4	Formal case presentation	Week 2	10	10%	a 1, b1, c1, c2, d1, d2
5	Presentation for one of the course content topics.	Week 2	5	5%	a 1, b1, c1, c2, d1, d2
6	Final exam	Week 2	50	50%	a 1, b1, c1, c2, d1, d2
<b>Total</b>			100	100%	



## IX. Learning Resources:

### 1- Required Textbook(s) ( maximum two ).

1. Chisholm-Burns et al, 2019 , Pharmacotherapy principles & practice. 5rd edition.
2. Katzung, 2018, Basic & Clinical Pharmacology. 14th edition.

### 2- Essential References.

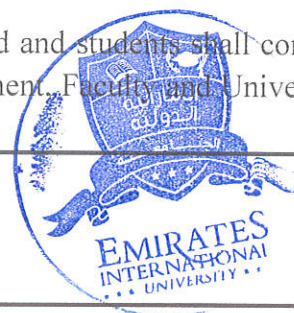
1. DiPiro et al, 2017, Pharmacotherapy: A Pathophysiological Approach, 10th edition.
2. Caroline S. Zeind and Michael G. Carvalho, 2018, Applied Therapeutics: The Clinical U Drugs, 11th edition.
3. Walker & Whittlesea, 2018. Clinical Pharmacy and Therapeutics, 6 edition.
4. Lexicomp, (2018). Drug Information Handbook, 27h edition, Lexi-Comp, U.S.A

### 3- Electronic Materials and Web Sites etc.

- UpToDate
- <http://www.globalrph.com/>
- Updated Clinical Practice Guidelines for selected course disorders

## X. Course Policies: (Based on the Uniform Students' By law (2007)

	<b>Class Attendance:</b>
1	Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
	<b>Tardiness:</b>
2	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
	<b>Exam Attendance/Punctuality:</b>
3	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
	<b>Assignments &amp; Projects:</b>
4	Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
	<b>Cheating:</b>
5	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
	<b>Forgery and Impersonation:</b>
6	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
	<b>Other policies:</b>
7	The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.



## Faculty of Medicine and Health Science

### Department of Clinical Pharmacy

#### Bachelor of Pharm D

#### Course Specification of Pediatric clerkship (1)

Course No. ( CR 602)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr. Ali ALyahawi	Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

II. Course Identification and General Information:				
1	Course Title:	Pediatric clerkship		
2	Course Code & Number:	CR 602		
3	Credit Hours:	Credit Hours	Theory Hours	Lab/Training Hours
			Lecture	Exercise
		3	--	--
4	Study Level/ Semester at which this Course is offered:	6 Level / 1 Semester		
5	Pre –Requisite (if any):	Pharmacotherapy I-V		
6	Co –Requisite (if any):	None		
7	Program (s) in which the Course is Offered:	Bachelor of Pharm D		
8	Language of Teaching the Course:	English		
9	Study System:	Semester based System		
10	Mode of Delivery:	Full Time		
11	Location of Teaching the Course:	Faculty of Medical sciences		
12	Prepared by:	Dr. Ali ALyahawi		
13	Date of Approval:			



### III. Course Description:

This course is directed toward training the students to deal with real cases in hospital so each student will spend two weeks participating in a variety of clinical activities related to Pediatric health care and will include rotations in inpatient Pediatric unit. Some of the activities done by students include: solving a case for treatment-related problems (TRPs), patient counseling, therapeutic drug monitoring, checking dosage regimen, checking drug interactions and assessing safety and efficacy of medications.

### IV. Course Intended Learning Outcomes (CILOs) :

Upon successful completion of the Course, student will be able to:

	<b>A. Knowledge and Understanding:</b>
a1	Identify the common pediatric disease states and the pharmacist's role in optimize drug therapy in the clinical setting.
	<b>B. Intellectual Skills:</b>
b1	Analyze the patient information on which to base safe and effective medication
	<b>C. Professional and Practical Skills:</b>
c1	Implement rational therapeutic regimens and monitoring plans (care plans) by taking appropriate follow-up actions
c2	Participate in the medication reconciliation process at admission and discharge as needed to optimize patient outcomes.
	<b>D. Transferable Skills:</b>
d1	Share successfully in team-work and improve student skills of patients interview.
d2	Develop independent self-learning skills.

### V. Course Contents:

#### A. Theoretical Aspect:

#### B. Case Studies and Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	contact hours
1	<u>Pediatric unit</u> Vaccination Pediatrics growth charts Pneumonia in infants and children Hypertension in children Status epilepticus. Type 1 diabetes mellitus in children. Hyperglycemic crisis	Week 1-3	144

	Chronic kidney disease in children Meningitis in children Urinary tract infection in children Fever without focus Nephrotic syndrome Cystic fibrosis Gastroenteritis Vesicouretral reflux Neurogenic bladder Peritoneal dialysis. Peritonitis			
<b>Number of Weeks /and Units Per Semester</b>		<b>3 weeks</b>	<b>144</b>	

### VI. Teaching Strategies of the Course:

- Clinical cases studies
- Discussions & Small group discussions
- Seminars
- Training
- Self-learning
- Group learning and Problem-based learning

### VII. Assessment Methods of the Course:

- Assignments
- Oral case discussions during clinical rounds
- Seminar
- Pharmacy practice manual
- Formal case presentation
- Presentation for one of the course content topics.
- -Exam

### VII. Assignments:

No	Assignments	Week Due	Mark
1	<b>Assignment 1:</b> Develop a pharmaceutical care plan for selected case in pediatric diseases according to appropriate primary literature and updated guidelines.	Week 1	5
2	<b>Assignment 2:</b> Develop a pharmaceutical care plan for selected case in pediatric	Wee 2	

disorders according to appropriate primary literature and updated guidelines.		
<b>Total</b>		10

### VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	
1	Assignments	Weekly 1-2	10	10%	
2	Oral case discussions during clinical rounds	Weekly 1-2	10	10%	
3	Pharmacy practice manual	Weekly 1-2	15	15%	
4	Formal case presentation	Week 2	10	10%	
5	Presentation for one of the course content topics.	Week 2	5	5%	
6	Final exam	Week 2	50	50%	
<b>Total</b>			100	100%	

### X. Learning Resources:

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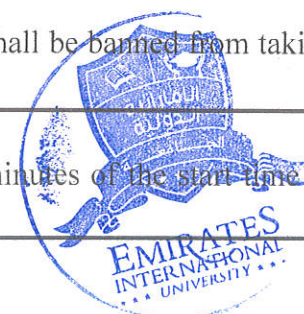
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3	<p><b>Exam Attendance/Punctuality:</b></p> <p>No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
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7	<p><b>Other policies:</b></p> <p>The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.</p>

