

UNIVERSITY OF THE PHILIPPINES
College of Medicine – Philippine General Hospital
University of the Philippines Manila

Pediatrics 251 – Integrated Clinical Clerkship II in Pediatrics
1st and 2nd Semester, AY 2022-2023

COURSE GUIDE

COURSE DESCRIPTION

Welcome to Integrated Clinical Clerkship II in Pediatrics! Good job for making it this far. In this course, you will get your first-hand experience in diagnosing and managing pediatric patients with common conditions requiring admission into hospital. This is a 4-week clinical rotation and you'll be part of a team of doctors taking care of patients at the emergency room, nursery/neonatal ICU and the wards. At the end of your rotation, you should be quite comfortable and confident in interacting with patients, getting salient points in history, doing a physical examination, coming up with your primary working impression after considering several differential diagnoses, requesting for the appropriate diagnostic tests, providing the proper management and performing procedures. Your consultants and resident monitors will be around to guide you throughout this process.

Due to the current pandemic, there will be changes that may happen during your rotation. At present, there will be two 2-week rotations (18 weeks apart). All rotations will be face to face (as long as circumstances allow) but there are some online requirements (ie, quizzes) that you will have to fulfill during your 1st rotation. The lectures and quizzes can be accessed through the learning management system (VLE). Students will be asked to engage in online activities including preceptorials (but take note that some preceptors may meet you face to face), attendance to department conferences/teaching rounds/endorsements. The IMCI encounter will be done online. The students will be asked to submit a reflection paper at the end of their rotation as assessment of their affective domain of learning.

COURSE LEARNING OUTCOMES

After completing this course, you should be able to achieve the following:

1. To show proficiency in history taking and physical examination of pediatric patients
2. To diagnose common childhood in-patient illnesses incorporating the pathophysiology of the disease
3. To decide on the appropriate diagnostic tools and interpret the results of common childhood in-patient illnesses
4. To formulate a plan of management for common childhood in-patient illnesses and preventive care
5. To perform common pediatric procedures competently
6. To exhibit the proper attitude and dedication to serve others that each UP medical graduate should possess, as well as develop confidence and patience in handling pediatric patients

COURSE OUTLINE

- I. Review of Pediatrics
 - A. History Taking and Physical Examination
 - B. ABG Interpretation
 - C. Chest X-ray Reading
 - D. ECG Interpretation
 - E. IMCI

II. Must Know Topics

Topic	
General Pediatrics	Growth and Development
	Dehydration, fluids and electrolytes
	Preventive pediatrics
	Pediatric procedures
	Pediatric Resuscitation
	Pediatric X-Ray Interpretation
Allergy and Immunology	Primary Immunodeficiency
	Anaphylaxis
	Adverse Drug Reactions
Cardiology	Myocarditis
	Rheumatic Heart Disease
	Rheumatic Fever
	Congenital Heart Disease
	Tetralogy of Fallot
	Patent Ductus Arteriosus
	Kawasaki Disease
	Infective Endocarditis
	Shock
	Pediatric ECG Interpretation
	Rhythm Disturbance
Endocrinology	Diabetes Mellitus Type 1
	DKA
	Cushing Syndrome
	Hypothyroidism
	Hyperthyroidism
	CAH
	Diabetes Insipidus
Gastroenterology	Acute Gastroenteritis
	Viral Hepatitis
	Biliary Atresia
	Kwashiorkor
	Marasmus
	Acute Gastritis
	Jaundice
Genetics	Trisomy 13
	Trisomy 18
	Maple syrup urine disease
	Newborn Screening

Hematology-Oncology	Acute Leukemia
	Chronic Myelogenous Leukemia
	Tumor lysis syndrome
	Langerhans cell histiocytosis
	Anemia
	Hemophilia
	Lymphoma
	Solid Abdominal Masses
Infectious Disease	Dengue Fever
	Typhoid Fever
	Pulmonary Tuberculosis
	Measles
	Leptospirosis
	Shigellosis
	Malaria
	COVID
	Fever of Unknown Origin
	Viral Exanthems
Neurology	Meningitis
	Status Epilepticus
	Febrile Seizures
	Brain Abscess
	TB Meningitis
	Meningocele
	Increased intracranial pressure
Pulmonology	Community Acquired Pneumonia
	Bronchial Asthma
	Bronchitis
	Pulmonary tuberculosis
	ABG Interpretation
Nephrology	Nephrotic Syndrome
	Nephritic Syndrome
	Urinary Tract Infection
	Hypertension
	SLE
	Chronic Kidney Disease
	CAKUT (Congenital anomalies of the kidney and urinary tract)
Neonatology	Newborn Care
	Breastfeeding
	Hyaline Membrane Disease
	Neonatal Jaundice
	Neonatal Sepsis
	Necrotizing enterocolitis
	PPHN
	Hemorrhagic Disease of the newborn

MODE OF DELIVERY

The videos on the review of pediatrics are available through the UP Manila VLE portal as well as the quizzes. In order to access this, you should have a UP Manila email address. Please contact the Information Management System at ims@post.upm.edu.ph if you do not have an existing UP Manila email address or if you have any issues with logging in.

As long as circumstances allow, your rotation will be done at the Philippine General Hospital where you will be assigned at the pediatric wards, pediatric emergency room and the nursery or Neonatal ICU for a hands-on experience.

The faculty course coordinator will be available weekly on Fridays 10-12nn for consultation.

COURSE MATERIALS

The primary textbook that will be used are: Nelson Textbook of Pediatrics (21st edition) and Fundamentals of Pediatrics (1st edition).

Additional course materials are available via the VLE in the "Additional Resources" folder.

Zoom links to Department of Pediatrics conferences and audits

STUDY SCHEDULE

Week Number	Module/ Topic	Learning Resources	Learning Tasks
1	Review of Pediatrics	UPM VLE – Pediatrics 251 Folder of Videos Readings on how to present Nelson's Pediatrics Fundamentals of Pediatrics	Watch the videos and answer the quizzes IMCI session Non-graded preceptorial (how to present) Student may start to choose a topic for video
2	Common pediatric conditions in the PER	Paper Cases Textbooks Nelson's Pediatrics Fundamentals of Pediatrics Self-study	Present a case (or preceptorial) on one of the common in-patient conditions (graded activity)
3	Pre-test rotation	VLE, self-study	Answer a quiz (non-graded, diagnostic)
3	Common pediatric conditions in the Wards	Paper Cases or Actual case Textbooks Nelson's Pediatrics Fundamentals of Pediatrics Self-study	Present a case (or preceptorial) on one of the common in-patient conditions (graded activity)

4	Common pediatric conditions in the NICU/nursery	Paper Cases or Actual Case Textbooks Nelson's Pediatrics Fundamentals of Pediatrics Self-study	Oral Examination
4	Reflection paper	Self-reflection	Make a reflection paper

COURSE REQUIREMENTS

Course Requirement 1 – Quizzes

There are 5 videos that can be accessed via UPM VLE. The videos are meant to be reviews on the following topics: history and physical examination of pediatric patients, basic fluids and electrolytes, ABG interpretation, Chest X-ray reading and ECG Interpretation. It is recommended that you answer the pre-test prior to watching each video. The pre-test will not count towards your final grade. Make sure that you watch the videos and read the prescribed textbook **PRIOR** to answering the 10-point quiz (to be answered in 30 -minutes) based on the video/lecture/handout/readings that needs to be answered. This will account for 2.5% of your grade. The quiz will be opened from 7am on the 1st day of your rotation and be closed by 5pm on the last day (of your first 2-week rotation).

The pre-test quiz or diagnostic quiz to be taken on the 3rd week of rotation, will be non-graded and its purpose is to see which aspects the student may need help with during their last 2 weeks of rotation. The quiz will be open at 7am on the first day of your 3rd week of rotation.

Course Requirement 2 – IMCI

The Integrated Management of Childhood Illness is a 1-2 hour session with Prof. Lulu Bravo or an LU6 consultant where the different components of IMCI are discussed. The students may be asked to do role playing or to come up with educational brochures. This will account for 5% of your grade.

Course Requirement 3 – Preceptorials / Paper Cases

The students are given a chance to interview a patient that is admitted in the wards, NICU or pediatric ER. If this is not possible, the students will be given paper cases. Two preceptors are assigned to a group of 5-6 students who will meet the group three times during their 4-week rotation. The discussion can be done synchronously using Zoom or if this is not possible, a written report will be submitted. The cases chosen will be on the common pediatric illness requiring admission to the hospital. The student should discuss the following: important points in the history taking, physical examination findings to be correlated with the pathophysiology of the disease, diagnostic examinations including their rationale and expected findings, therapeutic management and correlation to pathophysiology and anticipatory guidance or home instructions. References should be cited accordingly.

The first preceptorial will not count towards the students' final grade as it will serve as a learning activity on how to present a case properly. The next 2 preceptorials will be graded. Preceptorials will account for 20% of your grade.

The activity will be graded as follows:

Category	Grade
Complete and relevant history (points to elicit in history taking)	15
Physical examination findings to look out for	15
Differential Diagnosis	15
Present working impression and able to identify problems of patient	10
Appropriate management plan	5
Answer questions pertinent to the case adequately	5
Utilize critically appraised medical literature to further understand the case	5
Presented in an organized, integrated and clear manner	5
Used visual aids that are appropriate, concise and with clear content	5
Demonstrate good communication skills	5
Enthusiasm during the presentation and shows initiative in getting and sharing information	5
Respect for preceptor and peers	5
Good time management	5
TOTAL	100

Course Requirement 4 – Hospital Rotation / Supervisor Evaluation

As long as circumstances allow, the students will rotate in the hospital. Students will be part of a team of doctors taking care of patients at the non-COVID delivery room, DRI, neonatal ICU, the non-COVID wards and the pediatric emergency room. The students will be graded in each of the areas they will rotate in. This will comprise 25% of their total grade.

Ten students will be rotating at the wards (9 or 11), while the remaining 10 students will be at the PER, DR and DRI for the first week of the rotation. Students will exchange areas during the second week.

For the wards, 5 clerks will be assigned to each ward. The following scheme will be followed:

1. Students will be assigned to either ward 9 or 11. Students assigned to ward 9 will stay there for a week, likewise for ward 11.
2. Students will be assigned patients (the number may vary depending on the number of patients admitted) that they will take care of and be in-charge of for the duration of their rotation. The student-in-charge (SIC) is expected to co-manage simple cases with the supervision of the resident-in-charge (RIC).
 - The role of the SIC is to do daily rounds with the service residents. S/he should make notes (incoming/admitting notes, progress notes and discharge notes), carry out orders for their patients, perform procedures, monitor and accomplish needed paperwork (updated clinical abstracts, discharge summaries, etc.)
3. Students will be going on a 4-day duty scheme: PRE-DUTY1, PRE-DUTY2, DUTY, and POST-DUTY. All students must report daily to do rounds, join service rounds/consultant rounds, make progress notes and carry out orders for their patients.
 - PRE-DUTY clerks will be at the wards from 7AM to 7PM to do their SIC work.
 - DUTY clerks will do their SIC work from 7AM to 5PM. They will be given a rest period from 5PM to 7PM, after which they will come back at 7PM to receive endorsements from the pre-duty clerks. They will go on duty in the wards from 7PM to 6AM, and endorse to the SIC at the end of their tour of duty.
 - POST-DUTY clerks will be given a rest period from 8AM to 9AM, after which they will report back to the wards from 9AM to 12NN to do their SIC work.
 - All patients whose SICs are on break (i.e. duty PM break or post-duty) will be responsibility of the PRE-DUTY clerks.
4. Clerks will join the admission conference with the chief resident every Monday, Tuesday, Thursday and Friday from 7am to 8am.

For the Pediatric Emergency Room, a group of 5 clerks will rotate for 3-4 days. The following scheme will be followed:

1. Clerks will follow a 3-day duty scheme: AM DUTY, PM DUTY, and POST-DUTY. There will be 2 clerks-on-duty from 7PM to 7PM, and 2 clerks-on-duty from 7PM to 7AM at the PER.
2. Students assigned at the PER will work with a team of doctors to resuscitate newly admitted patients at the PER, facilitate procedures and monitoring of patients, and join in service/consultant rounds.

For the Delivery Room (Cather) and DRI, a group of 5 clerks will rotate for 3-4 days.

1. They will follow a 3-day duty scheme: AM DUTY, PM DUTY and POST-DUTY. For the delivery room and DRI, the following scheme will be followed:
 - The AM DUTY clerk/s will report in the delivery room for catcher duty from 7AM to 7PM.
 - The DUTY clerk/s will report in the DRI (Ward 15 and 16) from 7AM to 12NN. They will be given a rest period from 12NN to 7PM, and will report back at the delivery room for catcher duty from 7PM to 7AM.
2. Students assigned to the DR (catcher) will assist in catching babies, perform resuscitation guided by the catcher resident-on-duty as necessary, do procedures, and accomplish necessary paperwork for each delivery. Students may also be asked to monitor babies at the recovery room, and to provide breastfeeding support.
3. Students assigned to the DRI are expected to take care of the DRI patients, do procedures (including vaccination), and monitor babies, and join in service/consultant rounds.
4. The clerks are required to see one patient in the Neonatal ICU; S/he should do history and physical examination and be ready to present to a NICU fellow for a case presentation. This can be done during their POST-DUTY day.

Course Requirement 5 – Oral Exams

During the last week of the students' rotation, an oral examination to be administered by the faculty preceptor assigned to the block will be scheduled. Each student is given a case that s/he will have to discuss in 15 minutes. Cases will be based on the common pediatric conditions encountered in the emergency room, nursery/NICU and the wards. The student should discuss the following: important points in the history taking, physical examination findings to be correlated with the pathophysiology of the disease, diagnostic examinations including their rationale and expected findings, therapeutic management and correlation to pathophysiology and anticipatory guidance or home instructions. The oral examination will make up 20% of their final grade.

The following are the cases/conditions that the students must master:

Topic
Anaphylaxis
AGE with signs of dehydration
RHD
Kawasaki Disease
CAH in crisis
DKA
Biliary atresia
MSUD in crisis
Dengue with warning signs
Leptospirosis

Febrile seiures
Meningitis
PCAP C or D
Asthma in exacerbation
Nephritic syndrome
UTI
HMD
Neonatal jaundice

Course Requirement 7 – Written Exams

The students will have a 100-point final examination to be given at the end of the year covering the topics listed above. This will comprise 15% of their final grade.

In accordance with the UPCM, the LU6 students will have a comprehensive examination that will account for 10% of their final grade.

Course Requirement 8 – Reflection Paper

The students are asked to make a reflection paper or blog post regarding their rotation in pediatrics. This activity will be 2.5% of their final grade. The following are the questions that can be used as a guide: What did I learn from my clerkship rotation in Pedia considering that there is limited or no direct patient interaction due to the pandemic? How were my interactions with my blockmates and with the preceptors? Did I maximize my rotation? How could I have maximized my rotation more? How do I feel rotating in Pedia now as compared when I was an LU5student? What are my suggestions to improve my rotation in Pedia? What other teaching-learning activities could I suggest?

The LO will collate all of the papers per block and e-mail it to upcm lu6pediatrics@gmail.com. This is due 1 week after the last day of the 2nd rotation.

GENERAL GUIDELINES

All students should ensure that they are in their proper/appropriate PPE when going on duty. Level 2 PPE should be worn. When there is an intubated patient or when at the NICU, students should be on PPE 2.5. Students are discouraged from staying in their posts outside of their scheduled duty. Everyone must adhere to the infection control guidelines set by the hospital.

Students should do a daily temperature and symptom check on themselves. This should be reported to BESTS. Aside from this, students who will be going on duty should report whether they have symptoms or not to their LO prior to going to the hospital. Duty clerks will have to show their health supervision form (filled-up online) to the senior resident on duty within 30 minutes of arriving at their post

Any student who has the following symptoms: fever, cough, runny nose, muscle aches, repeated chills, sore throat, loss of taste or smell, headache, vomiting, diarrhea, difficulty breathing should NOT come into the hospital and should report to the resident coordinator who can assist them in reporting to the UPHS (UPHS number 0961-7321764 or email hs.uppggh@up.edu.ph)

DUTY SCHEDULE

Each block will be divided into 2 groups of 10 students. The first group will rotate in ward 9, ward 11 during the first week of the rotation, while the second group will rotate in the pediatric emergency room, delivery room, and DRI. Students will exchange areas during the second week of the rotation.

The duty schedule for the 2-week rotation is shown below:

WEEK 1							
WARD 11	MON	TUES	WED	THURS	FRI	SAT	SUN
Pre 1	A1, B1	E1	D1	C1	A1, B1	E1	D1
Pre 2	C1	A1, B1	E1	D1	C1	A1, B1	E1
Duty	D1	C1	A1, B1	E1	D1	C1	A1, B1
Post-duty	E1	D1	C1	A1, B1	E1	D1	C1

WARD 9	MON	TUES	WED	THURS	FRI	SAT	SUN
Pre1	F1, G1	J1	I1	H1	F1, G1	J1	I1
Pre2	H1	F1, G1	J1	I1	H1	F1, G1	J1
Duty	I1	H1	F1, G1	J1	I1	H1	F1, G1
Post-duty	J1	I1	H1	F1, G1	J1	I1	H1

WEEK 2							
	PER			CATCHER/DRI			
	MON	TUES	WED	THURS	FRI	SAT	SUN
AM duty	A2, B2	E2	C2, D2	A2, B2	E2	C2, D2	A2, B2
PM duty	C2, D2	A2, B2	E2	C2, D2	A2, B2	E2	C2, D2
Post	E2	C2, D2	A2, B2	E2	C2, D2	A2, B2	E2

	PER			CATCHER/DRI			
	MON	TUES	WED	THURS	FRI	SAT	SUN
AM duty	F2, G2	J2	H2, I2	F2, G2	J2	H2, I2	F2, G2
PM duty	H2, I2	F2, G2	J2	H2, I2	F2, G2	J2	H2, I2
Post	J2	H2, I2	F2, G2	J2	H2, I2	F2, G2	J2

Summary of Course Requirements and Grading

Category	% Distribution
Quizzes	2.5
IMCI Activity	5%
Reflection Paper	2.5%
Preceptorials/Paper Case	20%
Supervisor Evaluation	25%
Oral examination	20%
Final Exam	15%
Comprehensive Exam	10%

University Grade	MPL 70
1.0	96.50-100
1.25	92.50-96.49
1.5	89.50-92.49
1.75	86.50-89.49
2.0	82.50-86.49
2.25	79.50-82.49
2.5	76.50-79.49
2.75	72.50-76.49
3.0	69.50-72.49
4.0	62.50-69.49
5.0	</= 62.49

Summary of Expected Outputs

Week 1 and 2	Quizzes (graded based on video) 2 SGD (1 not graded and 1 PER) IMCI
Week 3 and 4	1 SGD (Ward or NICU) Oral examination 1 Reflection Paper/Blog Post

ABOUT THE INSTRUCTOR

I am Dr Mary Ann Abacan and I am the current head of the LU6 Committee in Pediatrics. The LU6 Committee is comprised of five other pediatricians of varying subspecialties (Dr Vanessa Torres-Ticzon, Dr Christina Lozada, Dr Resti Bautista, Dr Lourdes Resontoc, Dr Justine Yap). We are also joined by our advisers: Dr Mary Anne Castor, Dr Marissa Lukban and Dr Lorna Abad. Dr Lulu Bravo is also part of the team and handles the IMCI sessions. We are all ready to guide you through your rotation. I may be contacted through mrabacan@up.edu.ph.

HOUSE RULES

We are here to provide a service to our patients and we should treat them with utmost care and respect. We abide by the data privacy guidelines and conduct ourselves with professionalism. We do not post details or pictures on social media. We value integrity and should not plagiarize.