Study guide

Clinically Oriented Integrated Modular Curriculum

4th year MBBS

Renal Module-V

Table of Contents

1. Renal Module Team

Module Name: Renal Module

Duration of Module: 4 Weeks

Module Committee			Module Task Force Team		
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6.	Associate dean	Dr Asma Khan			
7.	Chairperson Community Medicine	Prof. Dr. Arshad Sabir	DME Implementation Team		
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Module Preparation team

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Coordinator

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Co-Coordinator

2.University Motto, Vision, Values & Goals

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited center of excellence in Medical Education, using evidence-based training techniques for development of highly Competent health professionals, who are lifelong experiential learner and are socially accountable.

3.Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

i. Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
ii. Develop and polish the skills required for providing medical services at all levels of the Health care delivery system in future life.
iii. Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Introduction

Renal module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to developing critical thinking for integration and application of basic knowledge for clinical application.

Rationale: System based learning structure is adopted. The Endocrinology module is designed to impart basic knowledge. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis, prevention of diseases and the principles of their therapeutics and management.

Module outcomes:

Knowledge

Each student will be able to acquire knowledge about the basic concepts of diseases in the community, use technology based medical education and to appreciate concepts & importance of

- Research
- Biomedical ethics
- Family medicine
- Artificial Intelligence

Skills

Interpret and analyze various practical & practices of clinical sciences.

Attitude

Demonstrate a professional attitude. Team building spirit and good communication skills.

This module will run in 4 weeks. The content covered will be made visible through introductory titles of the teaching sessions. Instructional strategies are given in the timetable and learning objectives are briefed in study guides. Study guides will also be available on university websites.

4. Terms & Abbreviations

Contents

5. Domains Of Learning According To Blooms Taxonomy

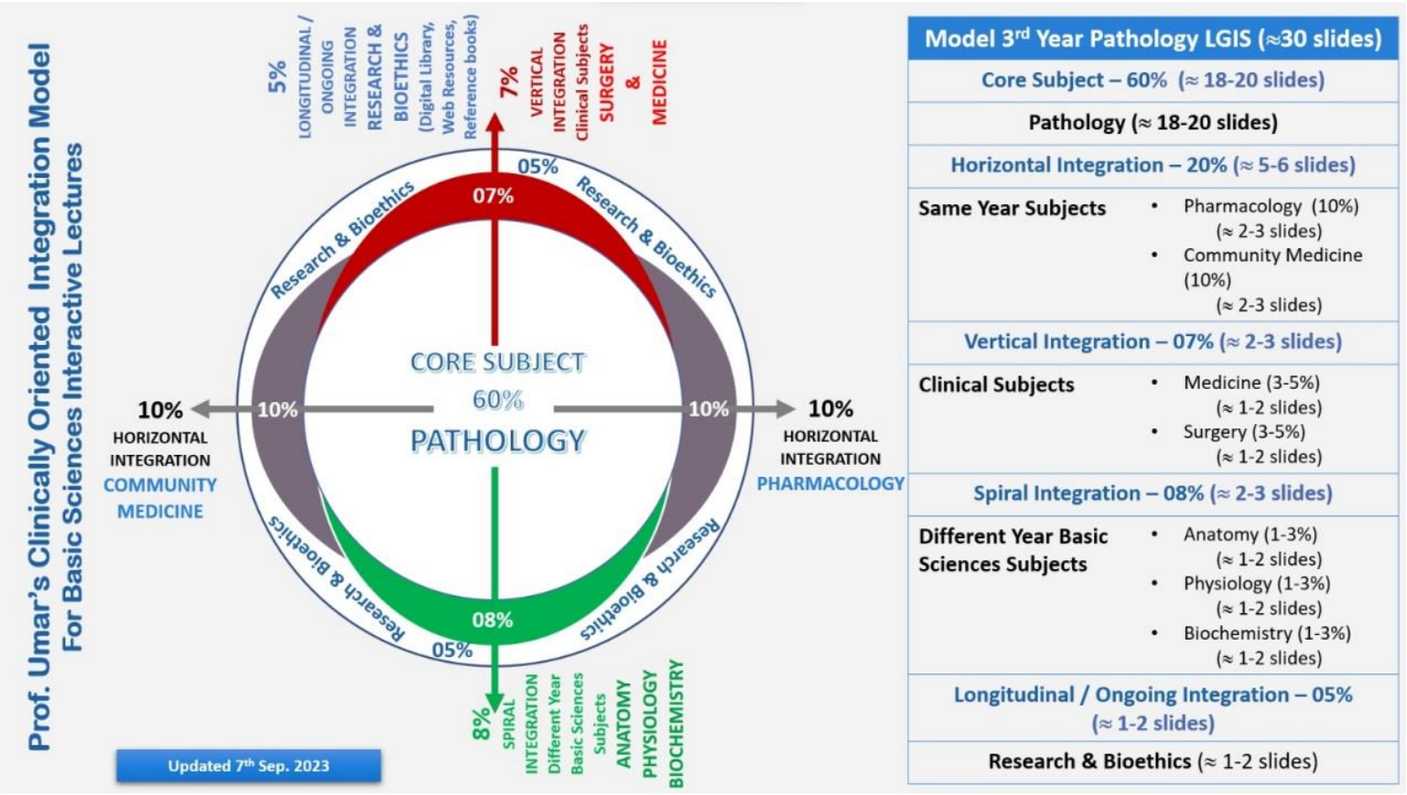
Sr. #	Abbreviation	Domains of learning
1.	C	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
2.	P	Psychomotor Domain: motor skills.
	P1	Imitation
	P2	Manipulation
	P3	Precision
	P4	Articulation
	P5	Naturalization
3.	A	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
	A2	Respond
	A3	Value
	A4	Organize
	A5	Internalize

6. Teaching and Learning Methodologies / Strategies

Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

Prof Umar Model Of Integrated Lecture



Model 3rd Year Pathology LGIS (≈30 slides)	
Core Subject – 60% (≈ 18-20 slides)	
Pathology (≈ 18-20 slides)	
Horizontal Integration – 20% (≈ 5-6 slides)	
Same Year Subjects	• Pharmacology (10%) (≈ 2-3 slides) • Community Medicine (10%) (≈ 2-3 slides)
Vertical Integration – 07% (≈ 2-3 slides)	
Clinical Subjects	• Medicine (3-5%) (≈ 1-2 slides) • Surgery (3-5%) (≈ 1-2 slides)
Spiral Integration – 08% (≈ 2-3 slides)	
Different Year Basic Sciences Subjects	• Anatomy (1-3%) (≈ 1-2 slides) • Physiology (1-3%) (≈ 1-2 slides) • Biochemistry (1-3%) (≈ 1-2 slides)
Longitudinal / Ongoing Integration – 05% (≈ 1-2 slides)	
Research & Bioethics (≈ 1-2 slides)	

7. Small Group Discussion (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self-study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Standardization of teaching content in SGD`s

S.No	Topics	Approximate %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the Topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

Step 1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step 2	Asking students pre-planned questions from previous teaching sessionto develop co-relation (these questions will be standardized)	5minutes
Step 3	Students divided into groups of three and allocation of learning objectives	5minutes
Step 4	ACTIVITY: Students will discuss the learning objectives among themselves	15 minutes
Step 5	Each group of students will present its learning objectives	20 min
Step 6	Discussion of learning content in the main group	30min
Step 7	Clarification of concept by the facilitator by asking structuredquestions from learning content	15 min
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step 10	Questions on vertical integration	
Step 11	Questions on related research article	
Step 12	Questions on related ethics content	
Step 13	Students Assessment on online MS teams (5 MCQs)	5 min
Step 14	Summarization of main points by the facilitator	5 min
Step 15	Students feedback on the SGD and entry into log book	5 min
Step 16	Ending remarks	

8 .Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing, and evaluating their learning experiences.
- Home based / time assignment.
- Learning objectives are briefed in study guide
- Learning resources including pages, book names etc or link / web site
- Assessment: it will be online on LMS on a predefined schedule

Case Based Learning (CBL)

- It’s a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.
- Case scenario will be given to the students
- Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.

Learning Objectives, Teaching Strategies & Assessments

Learning objectives are given to the students and will be based on:

- Purpose to provide students with a relevant opportunity to see theory in practice • Require students to analyze data in order to reach a conclusion.
- Develop analytic, communicative and collaborative skills along with content

Contents of the Module

1. Horizontally Integrated Basic Sciences (Physiology, Pharmacology, Pathology, Community Medicine) 2. Large Group Interactive Session (LGIS):

i. Pathology
ii. Community Medicine
iii. Pharmacology
iv. Nephrology/Medicine
v. Urology/Surgery
vi. Pediatrics

3. Small Group Discussions (SGD)

i. Pathology
ii. Community Medicine
iii. Pharmacology

4.Self-Directed Topic, Learning Objectives & References (SDL)

i. Pathology
ii. Community Medicine
iii. Pharmacology

5. PAL

Community medicine

6. SKILL LAB

i. Pathology
ii. Pharmacology

7.CBL

i. Pathology
ii. Pharmacology
iii. urology

8.Wards, operation theatres

i. Surgery
ii. Medicine

Horizontally Integrated Basic Sciences

S no	Subjects	Teaching hours without practical/PAL
1	Pathology (LGIS+SGD+CBL)	9
2	Community medicine (LGIS+SGD+BIOETHICS)	13
3	Pharmacology (LGIS+SGD+CBL)	6

9.Learning Objectives Of Pathology (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
Mechanism of glomerular injury, nephritic syndrome(post streptococcal glomerulonephritis)	• Classification of glomerular diseases • Introduction types ,causes &sign symptoms of glomerular diseases • Pathophysiology & related • Investigations of post streptococcal glomerulonephritis	The student should be able to -Classify glomerular diseases. -Differentiate between nephrotic and nephritic syndrome -Describe the pathogenic mechanisms of diseases causing nephritic syndrome • -Describe the morphological changes in post streptococcal glomerulonephritis	C3 C3 C2 C2	LGIS	MCQs, SEQs, OSPE Viva
Diseases causing nephritic syndrome Iga nephropathy ,hereditary nephritis,rpgn, crescenteric gn,immune complex mediated gn	• Introduction types ,causes &clinical features of Nephritic syndrome • Glomerular injury mechaism • Pathophysiology of nephritic syndrome • Related morphology & investigations •	-Describe the morphological changes in diseases causing nephritic syndrome -Describe the lab diagnosis of nephritic syndrome	C2 C2	LGIS	MCQs, SEQs, OSPE Viva
Pathologic basis of nephrotic syndrome Primary glomerular diseases	• Classification of primary glomerular diseass • Mechanism of diseases causing glomerular injury • Related morphology & investigations	. Categorize glomerular diseases leading to nephrotic syndrome -Describe the pathogenic mechanisms of diseases causing nephrotic syndrome -Describe the morphological changes in diseases causing nephrotic syndrome -Formulate the lab diagnosis of nephrotic syndrome	C3 C2 C2 C3	LGIS	MCQs, SEQs, OSPE Viva
Nephrotic syndrome in Systemic diseases Diabetes melitis Amyloidosis Sle Miscellaneous	• Glomerular diseases leading to nephrotic syndrome • Pathogenic mechanisms causing nephrotic syndromes • Related investigations	-Categorize systemic diseases leading to nephrotic syndrome -Describe the pathogenic mechanisms of systemic diseases causing nephrotic syndrome -Describe the morphological changes in systemic diseases causing nephrotic syndrome -Formulate the lab diagnosis of nephrotic syndrome	C3 C2 C2 C3	LGIS	MCQs, SEQs, OSPE Viva

Learning Objectives Of Community Medicine (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Assessment tool
Entomology Introduction & Classification of Arthropods of Public Health Importance	Medical Entomology; Transmission of arthropod borne diseases	• Define Medical entomology. Define vector along with examples. Enlist and classify arthropods of medical importance. • Identify, differentiate and explain features of various classes of arthropods. • Explain with examples modes of transmission of arthropods borne diseases. • Draw and explain life cycle of plasmodium along with various mosquito control measures Describe importance of entomology from public health aspect.	C1 C1 C2 C2	MCQ, SEQ
Transmission of Arthropod Infections Diseases transmitted by Arthropods integrated vector management	Medical Entomology. Principles Of Arthropods Control	• Enlist diseases caused by house fly. Describe life cycle of house fly and its habitat along with various methods to control fly. Identify and describe sand-fly, Tsetse fly, and black fly along with diseases caused by them. Describe integrated approach towards control of class insect.	C1 C2 C2	MCQ, SEQ
Vector Born Diseases-I Epidemiology of Viral Hemorrhagic fever & Malaria	Vector borne diseases; Epidemiological determinants	• Define a vector and enlist various vector borne diseases. • Explain modes of transmission and propagation of parasites. • Define host and its types with examples. • Enlist and explain mosquito borne diseases • Explain life cycle of malarial parasites and integrated approach towards control of malaria. • Name various causes of viral hemorrhagic fever along with their clinical features. Enlist causes of relapsing fever and various methods towardscontrol of vector borne diseases.	C1&C2 C1&C2 C1, C2&C3 C1, C2	MCQ, SEQ
Vector Born Disease-II Prevention of Leishmaniasis & Scabies & Modes of Transmission of Filariasis	Vector borne diseases; Prevention & control	• Define and explain filariasis and life cycle of filarial parasites, Describe modes of transmission of filariasis and assessment of various mosquito control programs. • Explain Leishmaniasis, life cycle of sand-fly and integrated measures towards fly control. Explain scabies, its mode of spread along with curative andpreventive measures.	C1 C1 C2	MCQ, SEQ
Snake Bite	Epidemiology Prevention of snakebite	• Describe importance of snake bite, the epidemiology of snake bite • Differentiate between clinical manifestations of different types of snakes, Enumerate ways of prevention from snakebite Management of snakebite, Enlist people more at risk	C1 C1	MCQ, SEQ
Disaster Management	Types of disaster Disaster management triage	• Define disaster • Differentiate between natural and man made disaster • Classify different types of disaster • Assess the magnitude of disaster • Describe all the disaster management steps Understand triage and its importance in disaster management	C1&C2 C1&C2	MCQ, SEQ

Zoonotic diseases I	Introduction Viral Zoonotic Disease Rabies	• Explain introduction of zoonosis, Discuss rabies disease, its origin and pathophysiology. • Identify the preventive aspects of rabies. Enlist vaccination schedule discussion in detail.	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Viral & Bacterial Zoonotic Disease II	Chikungunya, Japanese encephalitis, bacterial zoonotic anthrax	• Understand chikungunya, its pathophysiology. • Discuss the preventive and health education aspects relevant to it. • Explain Japanese encephalitis, clinical features and pathophysiology • Strategize its prevention. • Explain Anthrax and classify its types • Identify clinical features , diagnose the disease • Categorize the prevention under different levels of prevention	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Zoonotic Disease III	Plague Brucellosis	•Define plague, its history and epidemiology •Demonstrate epidemiological triad of plague, types of plague with its prevention and treatment •Define brucellosis •Demonstrate epidemiological triad •Concept of control in humans, prevention and treatment	C1 C2 C3 C1 C1 C2	MCQ, SEQ MCQ, SEQ
Zoonotic Disease IV	Tetanus, Human Salmonellosis	• Identify The causative agent, pathophysiology of tetanus, Enlist types of tetanus. • Understand Vaccination schedule of tetanus. Explain Preventive approach to be adopted in tetanus. • Define human salmonellosis', its epidemiology • Demonstrate its epidemiological triad, with its types Prevention and treatment of salmonellosis	C1 C2 C2 C1 C2 C2	MCQ, SEQ MCQ, SEQ

Learning Objectives of Pharmacology (LGIS)

TOPIC	Contents Outlines (Major Topics & Sub-Topics)	Learning objectives At the end of session student will be able to	Learning domain	Assessment tool
Diuretics I	Carbonic Anhydrase inhibitors	• Classify Diuretics • Discuss the kinetics and Pharmacodynamics of Carbonic Anhydrase Inhibitors • Rationale of uses of Carbonic Anhydrase Inhibitors in different clinical conditions Discuss the Adverse Effects & drug interactions of Carbonic Anhydrase Inhibitors	C1 C2	MCQ/SEQ
Diuretics II	Loop Diuretics	• Discuss the kinetics and Pharmacodynamics of loop diuretics • Rationale of uses of loop diuretics in different clinical conditions Discuss the Adverse Effects & drug interactions of loop diuretics	C1 C2 C1 C2	MCQ/SEQ
Diuretics III	Thiazide & Thiazide Like Diuretics	• Discuss the kinetics and Pharmacodynamics of Thiazide & Thiazide like Diuretics • Rationale of uses of Thiazide diuretics in different clinical conditions Discuss the Adverse Effects & drug interactions of Thiazide diuretics	C1 C2	MCQ/SEQ
Diuretics IV	Potassium Sparing Diuretics	• Discuss the kinetics and Pharmacodynamics of Potassium Sparing Diuretics • Rationale of uses of Potassium sparing diuretics in different clinical conditions Discuss the Adverse Effects & drug interactions of Potassium Sparing diuretics	C1 C2	MCQ/SEQ

Learning objectives of Family medicine LGIS

Major topic	Sub topics	LOS at the end of session students will be able to	COGNITIVE DOMAINS	MODE OF ASSESMENT
Urology and family medicine	Benign prostatic hyperplasia, Hematuria	• Describe the clinical features, investigations and management of enlarged prostate in primary care settings • Explain the aetiology of painful and painless haematuria • Describe the red flags in patients with haematuria	C2 C2 C2	MCQS

Learning objectives of Bioethics (community medicine) LGIS

Major Topic	SUB TOPICS	LOS at the end of session students will be able to	Cognitive Domains	Mode Of Assesment
Research ethics	Discussion will cover; • Discuss different types of "Plagiarism" and • Outline "scientific misconduct" related to research and publication • Elaborate the significance of intellectual property in relation to medical writing • Intricate the issues related to authorship criteria • Discuss the ICJME Guidelines	• Demonstrate understanding of different types of "Plagiarism" and "scientific misconduct" as ways of lying, stealing or Cheating related to research and publication • Describe the concept of intellectual property" in reference to research ideas, medical writing, proposals, data, publication Identify issues related to authorship criteria for scientific journals • Describe the Authorship criteria according to ICMJE Guidelines • Identify potential sources of unethical conduct in dissemination of research such as plagiarism, fabrication of data, duplicate publication and gift authorships.	C2 C2 C2	MCQS

Small Group Discussions Pathology (SGDs)

Topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives After The Session Students Will Be Able To:	Learning domain	Teaching strategy	Assessment tool
• **Tubulointerstitial Diseases**	Acute pyelonephritis causes ,morphology & related investigations Chronic pyelonephritis causes ,morphology & related investigations acute tubular injury/Necrosis causes ,morphology & related investigations	-Categorise Tubulointerstitial disesases on the basis of aetiology -Correlate the pathogenic mechanisms with morphological changes in acute tubular injury -Correlate the pathogenic mechanisms with morphological changes in tubulointerstitial nephritis -Describe the gross and microscopic changes of acute and chronic pyelonephritis.	C3 C3 C3	SGD	MCQs, SEQs, OSPE Viva
• **Renal cystic diseases**	Simple cyst morphology investigations Adult polycystic kidney disease Pathogenesis, morphology, clinical features & related investigations Autosomal Recessive polycystic kidney disease Pathogenesis, morphology, clinical features & related investigations Medullary disease with cyst Pathogenesis, morphology, clinical features & related investigations	Classify the common congenital and acquired cystic renal diseases. Correlate the etiology with pathogenesis of simple renal cysts. Correlate the morphological features with pathogenesis of ADPKD Correlate the morphological features with pathogenesis of ARPKD Correlate the pathogenesis with morphology of nephronophthisis	C3	SGD	MCQs, SEQs, OSPE Viva
• **Renal tumors**	Pathogenesis, morphology , clinical features & related investigations of Neoplasms of kidney	Classify renal tumors on the basis of morphology Correlate the pathogenesis with morphology of benign and malignant tumors Differentiate between the morphology of various renal tumors Enlist Important prognostic markers of Renal cancers	C3 C3 C3 C1	SGD	MCQ, SEQ, VIVA
• **Renal vascular disease**	Pathogenesis, morphology , clinical features & related investigations of renal vascular disease			SGD	MCQ,SEQ,VIVA

Small Group Discussion Pharmacology

Topic	Content	Domain	MoA
UTI	Causes , pathogenesis, morphology & related investigations	C2	MCQs

Case Based Learning Of Pharmacology (CBL)

TOPIC	Learning objectives At the end of sessions student will be able to:	Learning domain	Assessment tool
Role of diuretics in Pulmonary edema	• Clinical Pharmacology of diuretics	C3	MCQ

Self Directed Learning Pathology

topic	Contents Outlines (Major Topics & Sub- Topics)	Learning objectives	Assessment tool	Learning resource
	• Week 1: • Pathogenesis & morphology of primary Glomerular diseases. • Week 2: • Pathogenesis & morphology of secondary Glomerular diseases. • • Week 3: • Diabetic Nephropathy • Week 4: • Causes of Heamaturia and related investigations	• The student should be able to: • Describe the morphological features and pathogenesis of primary glomerular diseases • . • Describe the morphological features and pathogenesis of secondary glomerular diseases • Know causes , morphology & basic laboratory investigations of Diabetic Nephropathy • Know causes and basic laboratory investigations Hematuria	MCQs	Robbins Basic pathology

Self Directed Learning Community Medicine

#	Major topic	Contents Outlines / Sub-Topics	Learning objectives. Students will be able to …	Learning resource	Estimated study time	Assessment tool -MCQs (TOS)	Mode of assessment
1	Re-emerging health problems	Antimicrobial resistance – a major public health problem.	Students should be able to: • Define Antimicrobial resistance. • Causes of antimicrobial resistance • Describe major examples of antimicrobial resistance and possible preventive measures.	K Park Ed. 27th (378-81)	4hrs	2-3MCQ	LMS-2
2	Hospital acquired infections	Hospital acquired infections / Nosocomial infections	Students should be able to: • Define HAIs. infections and its types. • Surveillance, Sources, & rout of speared of HAI. • Explain standard precautions and other measures to prevent HAIs.	1. K Park Ed. 27th (359-61)	4hrs	2-3 MCQs	LMS-3

Self Directed Learning Phamacology

S. No.	Topic	Los At the end of session student will be able to:	Reference
1	Acetazolamide for the prevention of acute mountain sickness	• Enlist the drugs used for acute mountain sickness • Describe the mechanism of action of acetazolamide • Discuss the role of acetazolamide for acute mountain sickness prevention	Acetazolamide for the prevention of acute mountain sickness--a systematic review and meta-analysis https://pubmed.ncbi.nlm.nih.gov/22943270/
2	MANITOL USE FOR REDUCING CEREBRAL OEDEMA	• Enlist the drugs used for reducing cerebral oedema • Describe the mechanism of action of manitol • Discuss the role of manitol in reducing cerebral oedema	Cerebral Edema and its Management https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4923559/#:~:text=Mannitol%20is%20thought%20to%20decrease,altering%20red%20blood%20cell%20rheology.
3	Drugs used for treatment of UTI	• Enlist the drugs used to treat UTI • Describe mechanism of action of the drugs	Management of uncomplicated urinary tract infections https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071654/

Vertically Integrated Subjects

Learning Objectives Of Urology (LGIS)

S no	topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Urinary Tract Congenital Anomalies	Upper urinary tract congenital anomalies, pathogenesis, diagnoses	• Types of renal and ureteric anomalies C2 • Discuss Incidence, presentation& impact on renal function C2 • Explain Pathogeneses and clinical findings C3 • Diagnose of upper urinary tract Anomalies C3 • Management of various anomalies & complications C3	LGIS	MCQS,SEQS
2	Congenital anomalies	Lower urinary tract congenital anomalies, pathogenesis, diagnoses	• Describe the anomalies of urinary Bladder, Urethra& testis C2 • Understand Clinical features, Presentation, Complications & treatment of various anomalies C3	LGIS	MCQS,SEQS
3	Urinary stones upper tract	Theories, Factors & management of urinary stones	• Describe the types of stones, various theories& factors C2 • Understand the clinical presentation and Definitive management C3	LGIS	MCQS,SEQS
4	Urinary stone disease lower tract	Theories, Factors & management of urinary stones	• Understand the Role of metabolic and malnutrition in the formation of vesical calculi in children C2 • Explain Clinical features & diagnosis C3 • Discuss diagnosis & treatment of Urinary Tract Infection C3	LGIS	MCQ, SEQS
5	Urinary tract trauma	Classification, etiology, management of trauma	• Understand the etiology of Urinary tract trauma. C2 • Classify Urinary tract traumas c2 • Present & investigate the case C3 • Management of Urinary tract trauma C3	LGIS	MCQS ,SEQS
6	Urinary incontinence	Types, Causes& management of incontinence	• Causes of urinary incontinence C2 • Diagnose and identify different types incontinence C3 • Manage urinary incontinence. C3	LGIS	MCQS, SEQS

7	Benign Prostatic Hyperplasia (BPH	Risk factors, signs symptoms	• Enlist the risk factors for BPH C2 • Enlist LUTS (Lower Urinary Tract Symptoms), Irritative& Obstructive Symptoms C3 • Understand IPSS (International Prostate Symptom Score) C3 • Investigations required for Diagnosis C3 • Discuss management on the basis of IPSS C3 • Explain the Indications and complications	LGIS	MCQS, SEQS
8	Prostate cancers	Incidence & Risk Factor Investigations s, management of ca prostate	• Explain Incidence & Risk Factors C2 • Present Patient with Cancer Prostate C3 • Enlist Investigations Specially PSA, TRUS/ TRUS guided biopsy and Gleason score & sum C3 Discuss management plan on the basis of history, Clinical findings &Histopathology C3	LGIS	MCQS, SEQS
9	Renal cell carcinoma	Incidence & Risk Factor Investigations s, management of ca	• Classify Renal Tumors C2 • Enlist etiology &risk factors C2 • Enlist Clinical features of Renal Cell Carcinoma C2 • Discuss Investigations & Staging of Renal Cell CarcinomaC3 Understand Management of Renal Cell Carcinoma	LGIS/CBL	MCQS, SEQS
10	Bladder cancers	Incidence & Risk Factor Investigations s, management of ca urinary bladder	• Classify and enlist risk factors of bladder cancers C2 • Explain Clinical Presentation C3 • Enlist Investigations & grading of tumor C3 • Discuss Management options C3	LGIS/CBL	MCQS, SEQS
11	Urinary Tract Infections	Incidence & Risk Factor Investigations s, management of UTI	• Define UTI C1 • Explain Common etiological agents & Risk factors of UTI • Discuss clinical features and complications c3 Discuss treatment plan of management C3	LGIS	MCQS, SEQS

Learning Objectives Of Nephrology (LGIS)

S no	Topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Glomerulonephritis	pathological mechanism different types & treatment plan	• Understand etiological agents/pathological mechanism behind Glomerulonephritis C2 • Classify different types of Glomerulonephritis. C2 • Individualize treatment plan according to types of GN. C3 • Understand the role of renal biopsy in GN. C3	LGIS	MCQS, SEQS
2	Nephrotic syndrome	Etiology, clinical features& management plan	• Know etiology of nephrotic syndrome. C2 • Describe clinical features of nephrotic syndrome C2 • laboratory workup of nephrotic syndrome C3 • Explain management plan of nephrotic syndrome.C3	LGIS	MCQS, SEQS
3	Acute renal failure	clinical features Laboratory workup& management of AKD	• Recall causes of acute renal failure.C2 • Describe clinical features of acute and chronic renal failure C3 • Enlist Laboratory workup & renal imaging in chronic kidney disease. C3 • Explain Complications of CKD and management OF CKD (Both Pharmacological & Non-pharmacological). C3	LGIS	MCQS, SEQS
4	Chronic renal failure	clinical features Laboratory workup& management of CKD	• Recall causes of chronic renal failure. C2 • Describe clinical features of acute and chronic renal failure C2 • Enlist Laboratory workup & renal imaging in chronic kidney disease. C3 • Explain Complications of CKD and management OF CKD (Both Pharmacological & Non-pharmacological). C3	LGIS	MCQS, SEQS
5	Interstitial nephritis	clinical features& management plan of interstitial nephritis	• Describe clinical presentation of patient with interstitial nephritis. C3 • Enlist laboratory work up and imaging modalities used for diagnosis of interstitial nephritis C3 • Explain management plan of interstitial nephritis. C3 • Identify etiology of interstitial nephritis.C2	LGIS	MCQS, SEQS

6	Urinary Tract Infection	clinical features& management plan of UTI	• Know common microbes causing UTI, according to various age groups. C2 • Identify symptoms and physical findings in UTI. C3 • Differentiate between uncomplicated and complicated UTI. C2 • Enlist laboratory workup required in UTI and describe pharmacological treatment plan. C3	LGIS	MCQS, SEQS

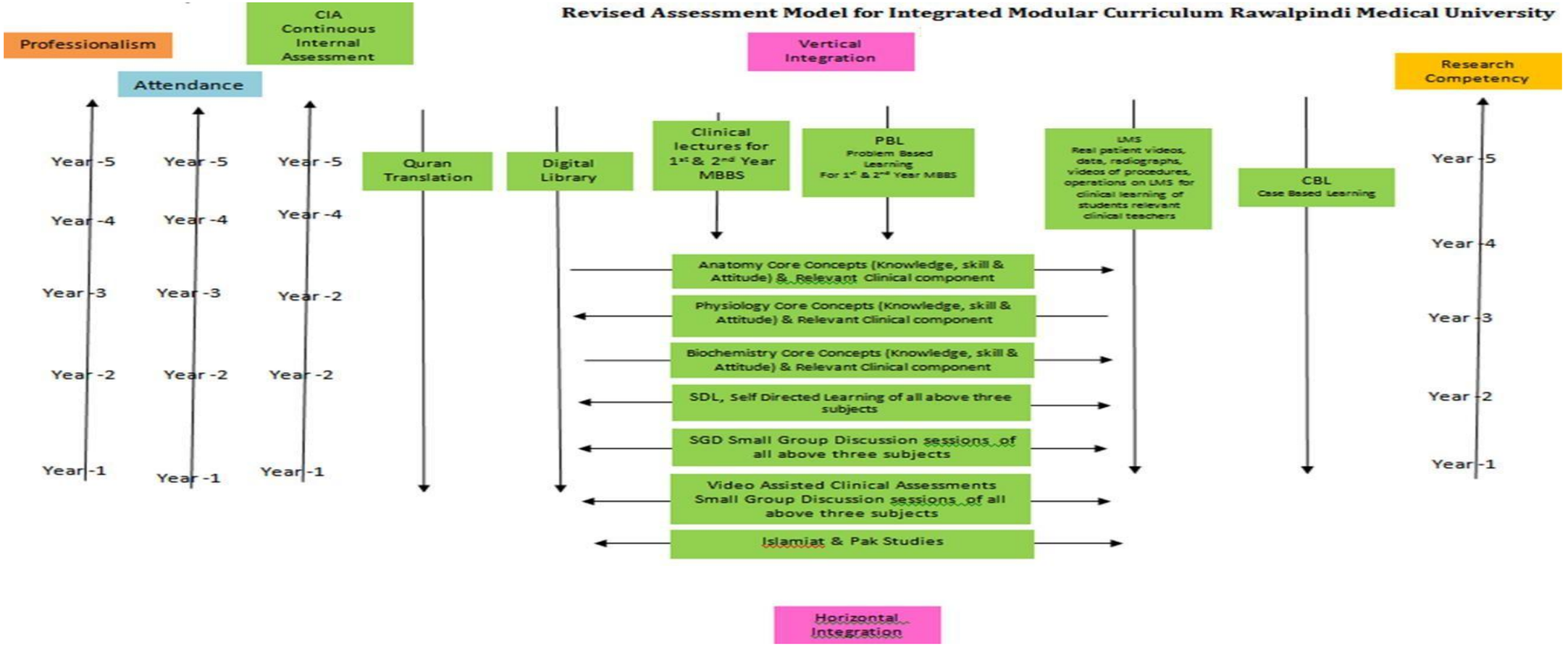
Learning Objectives Of Peadiatrics (LGIS)

S no	topic	Content outline & subtopics	Learning objectives with learning domain	Teaching strategy	Assessment strategy
1	Nephrotic syndrome	clinical presentation investigations, complications & management plan of Nephrotic syndrome	• Define Nephrotic Syndrome C2 • Discuss clinical presentation C3 • Differentiate minimal change disease from atypical nephrotic syndrome C2 • Plan pertinent investigations, interpret and take appropriate action C3 • Assess complications C3 • Manage disease and its complications C3	LGIS	MCQS, SEQS
2	Renal failure	clinical presentation investigations, complications & management plan of renal failure	• Define Acute& chronic Renal Failure c2 • Enlist common causes at different ages C2 • Describe clinical presentation C3 • Plan pertinent investigations, interpret and take appropriate action C3 • Make differential diagnosis C3 • Assess Complications C3 • Manage disease and its complication C3	LGIS	MCQS, SEQS

3	Urinary Tract Infections	clinical presentation investigations, complications & management of UTI	• Define UTI c1 • Explain Common etiological agent &Risk factors of UTI C2 • Discuss clinical features and complications C3 • Discuss treatment plan of management C3 • Define acute glomerular nephritis C3 • Discuss clinical presentation C3 • Make differential diagnosis C3 • Plan pertinent investigations, interpret and t • ake appropriate action C3 • Assess complications C3 Make plan of Management C3	LGIS	MCQS, SEQS

10. Assessment Policies: (Contents)

- Assessment Plan
- Types of Assessment
- Modular Examinations
- Block examinations



Gauge for Continuous Internal Assessment (CIA)

Red Zone	High Alert	Yellow Zone	Green Zone	Excellent	Extra Ordinary
0 - 25%	26 - *50%	51 - 60%	61 – 70%	71 – 80%	81 - 100%

*50% and above is Passing Marks.

Gauge for attendance percentage

Red Zone	High Alert	Yellow Zone-1	Yellow Zone-2	Green Zone	Excellent
0 - 25%	26 - 50%	51 - 60%	61 – 74%	*75 – 80%	81 - 100%

*75% is eligibility criteria for appearing in professional examination.

11. Assessment Plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment: Formative assessment is taken from topics of SDL, SGD (MS TEAM).

Summative Assessment: Summative assessment is taken at the mid modular, modular/block levels.

Modular Examinations

Theory Paper:

There is a module examination at the end of first module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

Viva Voce:

Structured table viva voce is conducted including the practical content of the module.

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper and OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE

This covers the practical content of whole block.

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the mid of module of SDL and SGD through LMS at mid of 2nd week. Assessment of clinical lectures on LMS. Tool for this assessment will be one best choice question.

Summative Assessment:

Summative assessment will be taken at the end of module, block and will be subject wise

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Frequency
1.	MCQ based Test	formative	Weekly SDL test	LMS / MS team	01 x no. of weeks
2.	One best option MCQs test	formative	Mid module during 2nd week	LMS	01
3.	Theory (MCQ+SEQ) and Viva Exam	Summative	End of module exam	On campus test	01
4.	End of clerkship Exam (OSCE, MCQs, OSPE)	Summative	(OSCE, MCQs, OSPE)	On campus	01

Assessment Frequency & Time In Renal Module

Types Of Community Medicine Assessment

Block	Renal module	Type of Assessments		Total Assessments Time			No. of Assessments	
Renal module	Sr #	Types of Assessments	Nature of assessment	Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Examinations (pathology 5 MCQS, Community Medicine 5MCQS, pharmacology5 MCQS) vertically integrated subjects 5 MCQS (20 MCQs) 20 marks	Formative	20 Minutes	230 minutes (4 hour)	30 Minutes	2-3 Formative	2 Summative
	2	SD Examinations (2-3) on LMS (10 MCQs) each exam 10 marks	Formative	60 Minutes				
	3	End Module Examinations	Summative	Detailed below				
	Breakup of EOM Assessment							
		i. Community medicine (4 SEQs and 20 MCQs) 40 marks	Summative	60 Minutes				
		ii. Pathology (4 SEQ&26MCQs) 46 marks		60min				
		iii. pharmacology (6 seq 10 MCQs) 40 marks	Summative	60 Minutes				
	4	iv. Ward test at the end of two weeks rotation in clinical subjects & End of clerkship C med (OSPE) 40 marks	Summative	40-60 minutes				

Types Of Assessment Pharmacology Department

S. No	Mode Of Assessment	Type Of Assessment	Schedule Of Assessment	Venue	Frequency
1.	MCQ	formative	Weekly SDL test	LMS	01x no.of weeks
2.	One best option MCQs test	formative	Mid module during 2nd week	LMS	01
3.	Theory (MCQ+SEQ) Practical (VIVA)	Summative	End of module exam	On campus test	01

Types Of Assessment Pathology Department

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Remarks
1	MCQ	Formative	Weekly SDL test	LMS	1per wk
2	One best option MCQs test	formative	Mid module during 2nd week	LMS	01
3	MCQ, SEQs, based examination OSPE Viva Exam	summative	End of module /block exam “	On campus test	01

Table Of Specification (TOS)

Renal Mid Module Assessment

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	Pathology	5	01	03	01
2.	Community Medicine	5	01	03	01
3.	Pharmacology	5	01	03	01
4.	Vertically integrated subjects	5	01	03	01
	Total	20			

Renal End of Module Assessment

Fourth Year MBBS 2023

Sr. #	Major subjects of the module to be assessed	No. of MCQs ff each subject	No. of MCQs according to cognitive domain			No. of SAQs (%)		No. of SAQs according to cognitive domain			viva	Total Marks
			C1	C2	C3	No. of items	Marks	C1	C2	C3		
1.	Pathology	25	05	10	10	05	25	1	2	2	20	70
2.	pharmacology	10	03	03	04	06	30	2	2	2	10	50
3.	Community Medicine	20	05	06	09	04	20	1	2	1	20	60
	Total MCQs Marks	55					75				60	
Grand Total											180	

12. Timetable

Staff / Human Resource Distribution of Department of Pathology in Block-III

Sr.no.	Designation	Total number of teaching staff
1	Professor	02
2	Associate professor	02
3	Assistant professor	04
4	Demonstrators	12

Detail of Contact hours (faculty) & contact hours (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (4). 1hrs each session (half class sessions)	2 x 4= 8 hrs.	4	Professor, associate, and assistant professors
2	SGD/CBL (4) approx. 1hrs each session. 1/4th class	4x1 x 4= 16hrs.	4	Assistant professors
3	Skill lab(3) approx. 2hrs per session.	3 x 2 = 6hrs.	1	Demos (subject specialists) supervised by professional faculties
4	SDL (2)	1 x 2 = 2 hrs.	2	Demos (subject specialists)
		Total: 32 hrs	11 hrs	

Categorization Of Modular Content Of Pathology Department

Category A*	Category B**	Category C***		
LGIS	LGIS	SGDS	SDL	CBL
Mechanism Of Glomerular Injury, Nephritic Syndrome(Post Streptococcal Glomerulonephritis)	Nephrotic syndrome in Systemic diseases Diabetes melitis Amyloidosis Sle Miscellaneous	Renal vascular diseases	Pathogenesis & morphology of primary Glomerular diseases	Urinary tract infections
Diseases Causing Nephritic Syndrome Iga Nephropathy ,Hereditary Nephritis,Rpgn, Crescenteric Gn,Immune Complex Mediated Gn		Tubulointerstitial diseases	• . Pathogenesis & morphology of secondary Glomerular diseases	
Pathologic Basis Of Nephrotic Syndrome Primary Glomerular Diseases		Renal cystic diseases	Diabetic Nephropathy	
		Renal tumors	Causes of Heamaturia and related investigations	

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors

Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.

Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators

Ranking Of Content Of Community Medicine

Category A*	Category B**	Category C***		
LGIS	LGIS	SDGS	SDL	IUGRC SESSIONS (PAL)
Entomology Introduction & Classification of Arthropods of Public Health Importance	Viral Zoonotic Disease Bacterial Zoonotic Disease	Parasitic Disease Introduction and Classification of Parasites Helminthology I	Antimicrobial resistance – a major public health problem.	Selection of research title (Finer Criteria) & literature review
Vector Born Diseases-I Epidemiology of Viral Hemorrhagic fever & Malaria, Vector Born Disease-II Bioethics	Rickettsial Zoonotic Disease Parasitic Zoonotic Diseases	Parasitic Disease important Parasitic infections Helminthology II	Hospital acquired infections / Nosocomial infections	
Disaster management, snake bite				

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.
Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators & senior PGTs)

Staff / Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	04
4	demonstrators	05
5	PGTs	05

Contact Hours (Faculty & Students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (6). 1hrs each session (half class sessions)	2 x 8= 16 hrs.	6	Professor, associate, and assistant professors
2	SGD (1) approx. 2hrs each session. 1/4class	1 x 4= 4 hrs.	4	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (2) approx. 2hrs per session. (16 small groups. 8 groups per day)	2 x 2 =4 hrs.	2	Demos (subject specialists) supervised by senior faculties
4	SDL (3)	1 x 1 =3 hrs.	3	Demos (subject specialists)
		Total: 27 hrs	15hrs	

Timetable 4th Year MBBS-Renal Module 2023

Saturday 16.9.23	08:00AM – 09:00AM		09:00AM – 10:00		10:00AM – 11:00AM		BREAK 11:00AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
	Pharmacology (LGIS)		Community Medicine (LGIS)		Community Medicine (LGIS)			Pharmacology(CBL)		Pathology- CBL		Community Medicine (LGIS)	
	DIURATICS I carbonic Anhydrase inhibitors		Medical Entomology I Transmission of Arthropods		BIOETHICS Ethics in research			Role of diuretics in pulmonary edema		UTI		Genetics	
	Odd CPC hall	Even lec hall 3	Odd CPC hall	Even Lec hall 3	Even hall 4	Odd hall 5		Hall 3, 4	Odd hall 5,6/forensic lab	Even hall 3,4	Hall 5,6 /forensic lab	Even hall 4	Hall 5 odd
	Dr Asma khan (assoc professor)	Dr Atiya Munir (assist professor	Dr Afifa Kalsoom (A, Professor)	Dr Asif (S Demo)	Prof Syed Arshad Sabir	Dr Khola Noreen		Dr Tahira,Dr Zaheer	Dr Uzma,Dr Robina	Dr Iqbal, Dr Sayyeda Aysha	Dr Unaiza, Dr Faiza	Dr Narjis	Dr Abdul Qudoos

Tentative Timetable 4TH Year MBBS-Renal Module 2023 First week (W.E.F 18.9.23-23.9.23.)

	8:00 AM – 9:00 AM	09:00am – 10:00am	BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 18.9.23	Anatomy (LGIS) Review Of Basic Anatomy Of Renal System (Revisit Lecture) Odd/ Lec hall 1 Even Dr. (Professor)	Community medicine (LGIS) Disaster management Even/lec hall 2 Dr Sana Bilal (Assc Prof)		CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.	
		Odd/lec hall 1 Dr Rizwana Shahid (A P)			
Tuesday 19.9.23	Pathology (LGIS 1) Mechanism Of Glomerular Injury, Nephritic Syndrome Even/lec hall 2 Dr Mobeena (Prof)	Bioethics ((LGIS) Duties of ERB Even/lec hall 2 Dr Arshd sabir (prof)			
	Odd/ Lec hall 1 Dr Wafa (Prof)	Odd /Lec hall 1 Dr khola Noreen (Assoc. prof)			
Wednesday 20.9.23	Urology (LGIS) Upper Urinary Tract Congenital Anomalies Even/lec hall 2 Dr. Zein El Amir (Professor)	Community Medicine (LGIS) Medical Entomology II Transmission Of Arthropods Even/lec hall 2 Dr Afifa Kalsoom (A, Professor)			
	Odd/ Lec hall 1 Dr M. Amin (sr. registrar)	Odd/ Lec hall 1 Dr Asif (S Demo)			
Thursday 21.9.22	Pathology(LGIS) Diseases Causing Nephritic Syndrome Even/lec hall 2 Dr Tayyaba (A Prof)	Community Medicine (LGIS) Handicap Even/lec hall 2 Dr Abdul Qudoos (S demo)		Dr Wafa (Prof)	Dr Wafa (Prof)
	Odd/ Lec hall 1 Dr Mudassara (A Prof)	Odd/ Lec hall 1 Dr Asif (S Demo)			
Friday 22.9.23	08:00AM – 09:45AM IUGRC / Skill lab Community Medicine / Pathology IUGRC VIVA/Parasitic disease/ Chronic Pyelonephritis Batch A-H All demonstrators will take their respective research batches	09:45AM – 10:30 Urology (LGIS) Lower Urinary Tract Congenital Anomalies Even hall 4 Dr. Zein El Amir (Professor)		10:30AM – 11:15AM Nephrology (LGIS) Glomerulonephritis Even /lec hall 5 Dr saima mir(DHQ)	11:15AM – 12:00PM Pathology(LGIS 3) Pathologic Basis Of Nephrotic Syndrome (Primary Glomerular Diseases) Even/lec hall 5 Dr Fatima Rizvi (Assoc Prof)
	Batch I-P Dr Fatima Rizvi (Demonstrator)	Odd hall 5 Dr M. Amin (sr. registrar)		Odd lec hall 4 Dr Asif (asst Prof,HFH)	Odd/lec hall4 Dr Fatima Tu Zahra
Saturday SEMINAR NEPHROTIC SYNDROME 23.9.23	08:00AM – 09:45AM IUGRC / skill lab Community Medicine / Pathology IUGRC VIVA/Parasitic disease/ Chronic Pyelonephritis Batch I-P All demonstrators will take their respective research batches	09:45AM – 10:30 Islamic Studies (LGIS) Even,Odd/ Lec hall 1 Mufti Wahid sb		10:30AM – 11:15AM Nephrology (LGIS) Nephritic Syndrome ODD hall 4 Dr Saima Mir (DHQ)	BREAK 11:15AM – 11:45AM
	Batch A-H Dr Abid (Sr Demonstrator)			Even hall 5 Dr Asif (Asst Prof,HFH)	

11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
Pathology (LGIS 4)		Paediatrics (LGIS)		Urology (LGIS)	
Nephrotic Syndrome In Systemic Diseases		Nephrotic Syndrome		Upper Urinary Tract Stone Diseases	
Even/lec hall 5	Odd/lec hall 4	Even/lec hall 5	Odd Odd/ Lec hall 4	Even/lec hall 5	Odd/ lec hall 4
Dr Fareeha sardar	Dr Rubina	Dr Mamoona.SR. BBH	Dr Moneeba (SR,BBH)	Dr M. Amin(sr. registrar)	Dr M. Ali (sr. registrar)

Tentative Time table 4TH Year MBBS-Renal Module 2023 (W.E.F 25.9.23-30.9.23) (2nd WEEK)

DATE / DAY	8:00 AM – 9:00 AM		09:00am – 10:00am		BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 25.9.23	Community Medicine		Pharmacology (LGIS)			CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.	
	Vector Born Diseases Epidemiological Determinants		Diuretics 1I loop diuretics				
	Odd /Lec hall 1	Even Even/lec hall 2	Even Even/lec hall 2	Even/lec hall 2			
	Dr Imran Younis (A, Professor)	Dr Asma khan (assoc professor)	Dr Asma khan (assoc professor)	Dr Maimoona (S Demo)			
Tuesday 26.9.23	Pharmacology (LGIS)		Community Medicine (LGIS)				
	Diuretics 1II Thiazide Diuretics		Vector Born Diseases Prevention & Control				
	Even Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1			
	Dr Asma khan (assoc professor)	Dr AtiyaMunir (assist professor)	Dr Imran Younis (A, Professor)	Dr Maimoona (S Demo)			
Wednesday 27.9.23	Urology (CBL)		Community Medicine (LGIS)				
	Trauma Urinary Tract.		Snake Bite Prevention				
	Odd /Lec hall 1	Even/lec hall 2	Even/lec hall 2	Odd /Lec hall 1			
	Dr Zeeshan (asst prof)	Dr Sadaat hashmi (sr. registrar)	Dr Rizwana shahid (AP)	Dr Sana bilal (Assos Professor)			
Thursday 28.9.23	Urology (LGIS)		Family Medicine (LGIS)				
	Lower Urinary Tract Stone Diseases		Red Flags Of BPH& Heamaturia				
	Odd /Lec hall 1	Even/lec hall 2	Even/Odd /Lec hall 1				
	DR. Zeeshan Qadeer (Ass. Professor)	Dr.Ali (sr. registrar)	Dr Saadia HOD Family Medicine Deptt				

	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM		
Friday 29.9.23	Pal / Skill Lab		Islamic Studies (LGIS)		Nephrology (LGIS)		Pathology (SGD 1)		
	Community Medicine / Pathology IUGRC presentations/(Wilms Tumor)				Acute Renal Failure		Renal Vascular Diseases		
	Batch A-H	Batch I-P	Odd /Lec hall 1 Even		Even	Odd	Even	Odd	
	Faculty of C med	Dr Mehreen (demonstrator)	Mufti Wahid sb		Dr Mudassar Murtza (BBH)	Dr Asif (asst Prof,HFH)	Dr Mudassra,Dr Amina Noor	Dr Rabiyya, Dr Fatim Tuz Zahra	

	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
Saturday SEMINAR RENAL FAILURE 30.9.23	Pal / Skill Lab Community Medicine / Pathology		Pathology (SGD 2)		Nephrology (LGIS)			Pharmacology(LGIS)		Paediatrics (LGIS)		Urology (LGIS)	
	IUGRC presentations/Wilms Tumor		Tubulointerstitial Diseases		Chronic Renal Failure			Diuretics IV Potassium Sparing		Renal Failure		Urinary Incontinence.	
	Batch I-P	Batch A-H	Hall 3,4	Hall 5,6	Even hall 4	Even hall 5		Even hall 4	Odd hall 5	Even hall 4	Odd hall5	Even hall 4	Odd hall5
	Faculty of C med	Dr Iqbal Haider, (Sr Demonstrator)	Dr Fariha,Dr Fatima Rizvi	Dr Tayyaba, Dr Sara Rafi	Dr Saima Mir (DHQ)	Dr Asif (Asst Prof)		Dr.Asma khan(assoc prof)	Dr.Attiya Munir (asst prof)	Dr Nosheen Riaz.SR HFH	Dr Sonia FazalSR. HFH	Dr M. Amin(sr. registrar)	Dr M. Ali (sr. registrar)

Tentative Timetable 4TH Year MBBS-Renal Module 2023 (W.E.F 2.10.23-7.10.23) (3rd Week)

DATE / DAY	8:00 AM – 9:00 AM		09:00am – 10:00am		BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 2.10.23	UROLOGY (CBL)		Community Medicine (Lgis)			CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.	
	Benign Prostatic Hyperplasia.		Zoonotic Diseases I Classification, Epidemiology Of Viral Zoonotic Diseases Rabies				
	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2			
	Dr. Zeeshan (asst Professor)	Dr. Faraz (sr. registrar)	Dr Abdul Qudoos (Sr. Demonstrator)	Dr Imrana Saeed (Sr. demonstrator)			
Tuesday 3.10.23	Urology (LGIS)		Community Medicine (LGIS)				
	Carcinoma Prostate		Epidemiology Of Viral Zoonotic Diseases, Chikungunya, Japanese Encephalitis				
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1			
	Dr. Zein El Amir (Professor)	Dr Faraz (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator))	Dr Imrana Saeed (Sr. demonstrator)			
Wednesday 4.10.23	Urology (LGIS)		Community Medicine (LGIS)				
	Renal Cell Carcinoma.		Epidemiology Of Bacterial Zoonotic Plague ,Brucellosis				
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1			
	Dr Zain ul Amir (prof)	Dr M. Ali (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator)	Dr Gulmehar (AP)			
Thursday 5.10.23	Urology (LGIS)		Community Medicine (LGIS)				
	Bladder Tumors.		Epidemiology Of Bacterial Zoonotic Tetanus, Anthrax				
	Even/lec hall 2	Odd /Lec hall 1	Even/lec hall 2	Odd /Lec hall 1			
	Dr. Zeeshan Qadeer AP	Dr Rameez Ahmed (sr. registrar)	Dr Abdul Qodoos (Sr. Demonstrator))	Dr Gulmehar (AP)			

	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		11:15AM – 12:00PM	
Friday 6.10.23	Community Medicine / Pathology SGD / skill lab		Pathology (SGD3)		Nephrology (LGIS)		Pathology	
	Epidemiology of parasitic disease/ Renal Cell And Transitional Cell Carcinoma		Renal Tumor		Renal Tumors		Revision class/SDL	
	Batch A-H	Even hall 4	Even hall 4	Even hall 5,6/forensic lab	Even hall 4	Odd hall 5	Even hall 4	Odd hall 5
	Dr Aysha /Dr Zaira Pgt	Dr Mudassra,Dr Amina Noor	Dr Mudassra,Dr Amina Noor	Dr Uzma,Dr Robina	Dr Saima Mir (DHQ)	Dr Mudassar Murtza(BBH)	Dr Mudassra	Dr Fatim Tuz Zahra

	08:00AM – 09:45AM		09:45AM – 10:30		10:30AM – 11:15AM		BREAK 11:15AM – 11:45AM	11:45AM – 12:30PM		12:30PM – 01:15PM		01:15PM – 02:00PM	
Saturday SEMINAR URINARY TRACT INFECTIONS 7.10.23	SGD / skill lab Community Medicine / Pathology		Pathology (SDG4)		Nephrology (SDG)			Pharmacology (SGD)		Paediatrics (LGIS)		Urology(LGIS)	
	Epidemiology of parasitic disease /Renal Cell Carcinoma And Transitional Cell Carcinoma		Renal Cystic Diseases		Urinary Tract Infections			Drugs Used To Treat Urinary Tract Infection		Urinary Tract Infections		Urinary Tract Infections.	
	Batch I-P	Batch A-H	Hall 3,4	Hall 5,6	Even hall 4	Even hall 5		Even hall 3,4	Odd hall 5,6/forensic lab	Even hall 4	Odd hali 5	Even hall 4	Odd hall 5
	Dr Aysha /Dr Zaira Pgt	Dr Unaiza (Sr Demonstrators)	Dr Fariha,,Dr Fatima Rizvi	Dr Tayyaba, Dr Sara Rafi	Dr Mudassar Murtza (BBH)	Dr Asif (asst prof, HFH)		Dr.Rubina Kausar,Dr Uzma (Demonstrator)	Dr Tahira,Dr.Zaheer (Demonstrator)	Dr Syrah Liaqat(SR .BBH)	Dr Uzma Abid(SR. HFH)	Dr M. Amin (sr. registrar)	Dr M. Ali (sr. registrar)

Tentative Time table 4TH Year MBBS-RENAL MODULE 2023 (Fourth WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am	BREAK 10:00AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 9.10.23	Module Written Exam			CLINICAL CLERKSHIP of community medicine attached as annexures at the end of document Community oriented clerkship and other rotations will remain same. These will be completed at end of yr.	
Tuesday 10.10.23	Viva All Horizontally Integrated Subjects				
Wednesday 11.10.23	Viva All Horizontally Integrated Subjects				
Thursday 12.10.23	Viva All Horizontally Integrated Subjects				

Community Oriented Clerkship Module

Theme (AIM):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc. are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

Learning Outcomes (LOS):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

Module Outline:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks (Monday to Thursday-04 hrs. /day & for 32hrs in total). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPS Of Learning & Assessments:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. O5 Max Marks are reserved for CHC (HMDTD and Health awareness work.

- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.

Day	Activity -I 10.30 – 11.00	Activity – II 11.00- 11.30am	Activity -III 11.30- 01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching-learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1st day	instructing / demonstration on Practical Manual based Assignments	Visit to CHC SGIS on Health days commemoration work, Display material, PPT.	SGIS on HM-DTD practicum. Topic finalization, CHC- Message draft outlines finalization.	PPT based Demo on How to conduct & report HHS. Guidelines on PHI work to be done during clinical rotations / ward duties	• Demonstration / lec - Hall 3 • CHC - Dept CM NTB RMU.	1-2 OSPE in end of clerkship exam (credit will part of IA) Assessment of HHS -Report (Max marks: 5 part practical/viva exam 4th Prof MBBS)	Construct a health message. (C6) Prepare Health days commemoration stuff, Display material, PPT, (P) Undertake a health survey. (HHS) (C3)
2nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	Demo Room, EPI Center HFH OPD, hospital shelters sites for health awareness work (HAW)	1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW	Explain cold chain component at EPI center Vaccinate (EPI) vaccines to the clients . Comprehend EPI system
3rd day	Follow up session on HM-DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	FP Center HFH OPD, hospital shelters sites for HAW	1-2 OSPE in end of clerkship exam (credit will part of IA) Grade of performance in EPI visit reporting. Credit of HAW	Identify CP devices available at MHC FP center Counsel clients for use of a contraception method Place CP devices to client (P)
4th day	Follow up session on HM-DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	FV to the hospital waste disposal system & relevant sites / Incinerator	Health awareness work (HAW)	FP Center HFH OPD, hospital shelters sites for HAW	End of module OSPE Grade of performance in visits to sites	Explain hospital waste disposal system Develop a hospital waste management plan Explains various domains of

5th day (week 2)	SGIS / PPT based briefing on Hospital management & administration	Visit to Hospital management & administration (HFH) office	Health awareness work (HAW	HHF	End of module OSPE Grade of performance in visits to sites	hospital management (C2)
6th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khyaban Sir-Syed (RHC) or BHU	• Demo room / lec Hall 3 NTB / CPC-Hall . • RHC / BHU	Health awareness work (HAW at site visited	End of module OSPE Report credit in PJ	Explain working of FLCF Appreciate PHC elements at FLCF. (C2)
7th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)		12.00 – 2.00pm Completion & assessment of relevant Practical Journal work, HHS-report book, Logbook etc. Feedback discussion on PHI		Communication skills Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) Undertake a preventive Healthcare inquiry	

Clinical Training Rotations 4th Year MBBS Class (Session 2019-2020)

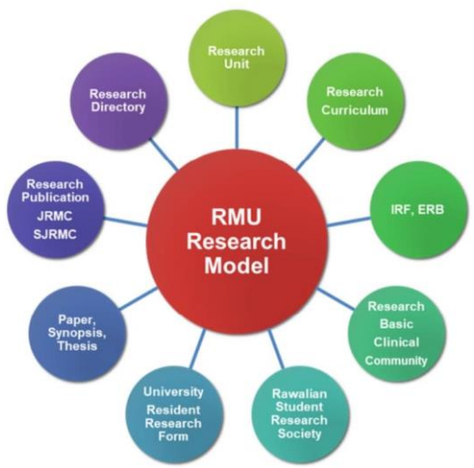
Starting w.e.f 06-03-2023 Ending 03-12-2023.

Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H	E.N.T. D.H.Q	Medicine DHQ	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGERY
06-03-2023 To 19-03-2023	A	B1, HFH-1 B2, HFH-2	C1, BBH C2, DHQ	D	E	F	G	H	I	J	K	L	M	N	O	P
20-03-2023 To 02-04-2023	B	C1, HFH-1 C2, HFH-2	D1, BBH D2, DHQ	E	F	G	H	I	J	K	L	N		O	P	A
03-04-2023 To 16-04-2023	C	D1, HFH-1 D2, HFH-2	E1, BBH E2, DHQ	F	G	H	I	J	K	L	M		O	P	A	B
17-04-2023 To 07-05-2023 Spring V.	D	E1, HFH-1 E2, HFH-2	F1, BBH F2, DHQ	G	H	I	J	K	L	M	N	P		A	B	C
08-05-2023 To 28-05-2023 Sport W.	E	F1, HFH-1 F2, HFH-2	G1, BBH G2, DHQ	H	I	J	K	L	M	N	O		A	B	C	D
29-05-2023 To 11-06-2023	F	G1, HFH-1 G2, HFH-2	H1, BBH H2, DHQ	I	J	K	L	M	N	O	P	B		C	D	E
12-06-2023 To 31-07-2023 Summer V.	G	H1, HFH-1 H2, HFH-2	I1, BBH I2, DHQ	J	K	L	M	N	O	P	A		C	D	E	F
01-08-2023 To 13-08-2023	H	I1, HFH-1 I2, HFH-2	J1, BBH J2, DHQ	K	L	M	N	O	P	A	B	D		E	F	G
14-08-2023 To 27-08-2023	I	J1, HFH-1 J2, HFH-2	K1, BBH K2, DHQ	L	M	N	O	P	A	B	C		E	F	G	H

28-08-2023 To 10-09-2023	J	K1, HFH-1 K2, HFH-2	L1, BBH L2, DHQ	M	N	O	P	A	B	C	D	F		G	H	I
11-09-2023 To 24-09-2023	K	L1, HFH-1 L2, HFH-2	M1, BBH M2, DHQ	N	O	P	A	B	C	D	E		G	H	I	J
25-09-2023 To 08-10-2023	L	M1, HFH-1 M2, HFH-2	N1, BBH N2, DHQ	O	P	A	B	C	D	E	F	H		I	G	K
09-10-2023 To 22-10-2023	M	N1, HFH-1 N2, HFH-2	O1, BBH O2, DHQ	P	A	B	C	D	E	F	G		I	J	K	L
23-10-2023 To 05-11-2023	N	O1, HFH-1 O2, HFH-2	P1, BBH P2, DHQ	A	B	C	D	E	F	G	H	J		K	L	M
06-11-2023 To 19-11-2023	O	P1, HFH-1 P2, HFH-2	A1, BBH A2, DHQ	B	C	D	E	F	G	H	I		K	L	M	N
20-11-2023 To 03-12-2023	P	A1, HFH-1 A2, HFH-2	B1, BBH B2, DHQ	C	D	E	F	G	H	I	J	L		M	N	O
Date	Medicine /Neurology DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.MED	E.N.T. H.F.H.	E.N.T. B.B.H.	E.N.T. D.H.Q	Medicine D.H.Q	EYE H.F.H	EYE B.B.H.	EYE DHQ	PEADS H.F.H	PEADS B.B.H.	CARDIO	PATH	NEUROS URGERY

13.Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.



14. Biomedical Ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of non maleficence,
3. Principle of beneficence, and
4. Principle of justice.

15. Family Medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

16. Artificial Intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.