WAH MEDICAL COLLEGE

2023-2027



Department of Medical Education

STUDY GUIDE
5th YEAR MBBS
Surgery

2023-2027

Contents

VISION **4**

MISSION **4**

1. **Outcomes of WMC MBBS Program** 5
2. **Introduction to the Stud Guide** 6
3. **Commonly used abbreviations & Logos in the study guide** 7
4. **Assessment Map & Strategies** 10

i. **Internal Assessment** 11

5. **Clerkship Committee** 12
6. **Course Content** 13

Medicine **13**

- **6.1 Unit I – Morning Sessions** **14**
- **6.2 Unit II – Morning Sessions** **41**
- **6.3 Unit I – Evening Sessions** **62**
- **6.4 Unit II – Evening Sessions (CCU Rotation)** **74**
- **6.5 Allied Medicine Topics** **82**

7. **Learning Resources & Teaching Faculty** 105
8. **Rules & Regulations:** 107

i. **Student's code of conduct** 107

ii. **Attendance policy** 108

9. **Study tips** 109
10. **Feedback on the study guide** 110
11. **References:** **110**
12. **Annual Forecast** 111

VISION

National University of Medical Sciences envisions a world with a better quality of life for all by enhancing our contribution to healthcare, education, innovation, and research.

MISSION

To produce competent medical professional graduates equipped with sound knowledge & research capabilities based on scientific principles, imbued with ethics and moral values, primed to serve the community through the profession and pursue research & advanced training in any branch of medicine.

1. Outcomes of WMC MBBS Program

At the end of our five-year MBBS program, the graduates should be able to:
1. Independently manage common, non-critical clinical problems.
2. Assist in the management of critically ill patients & demonstrate competency in life saving procedures.
3. Exhibit the attributes of an ethical professional.
4. Conduct research which brings relevance to health care practices.
5. Act as an efficient community health promoter.
6. Exhibit scientific knowledge in all professional activities.
7. Demonstrate clear and efficient written &verbal communication skills.
8. Exhibit the habits of a lifelong learner.

2. Introduction to the Stud Guide

Dear Students,

The subject experts at Wah Medical College developed this study guide to support your learning during the clerkship block.

The guide aims to:

- Inform you about the organization of the learning programs, which includes the right contacts for support.
- Help you organize and manage your studies throughout the clerkship block.
- Define the expected outcomes to be achieved by the end of the clerkship block.
- Guide you on assessment methods, rules, and regulations.
- Identify the learning strategies that will be employed to achieve these outcomes and provide a list of recommended learning resources (books, journals) to maximize your learning.

Please note that:

A clerkship is a period of practical, supervised clinical training that medical students undergo, often specializing in a particular medical discipline (like internal medicine, pediatrics, or surgery). These training periods are scheduled consecutively in distinct time segments, and each segment is referred to as a clinical rotation.

There are eight rotations in total in the academic year, divided into two clerkship blocks. (Each having four clinical rotations). Students are divided into eight batches, and they undergo clerkships in rotations in specified disciplines as mentioned in the “Clerkship rotation schedule”.

3. Commonly used abbreviations & Logos in the study guide

Learning Outcomes:

Learning outcomes are statements that define the expected goal of your course, lesson, or activity in terms of demonstrable skills or knowledge that will be acquired by you because of instruction. In simple words, these are the things that you must be able to tell or do with the required attitude after learning a particular topic.

1. **Educational Strategies:**

   These are the methodologies through which you will be taught by your instructors.

Abbreviation	Logos
CBL: Case based learning	
Demonstrations	
SGD: Small group discussions	
BST: Bed Side Teaching	
Skill Lab	
Clinical Teaching (OPD/ OT/ IPD	

Small Group Discussion

This format helps students to clarify concepts, acquired skills or attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews, or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials, and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify concepts.

Case-Based Learning

This is a small group discussion format where learning is focused around a series of questions based on a clinical scenario. Specifically, designed case scenarios and the learning outcomes to be achieved are shared with the student before the session. Students prepare for the CBL and during class they discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the block. Faculty members are present as a guide and an assessor.

Self-Directed Study

Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from the Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college schedule hours for self-study.

Bedside teaching/ Ward rounds

Students learn clinical case scenarios/ patient examination firsthand at the patient's bedside with the help of the instructor in case of online teaching, the same cases will be shown to you online with the help of videos and live clinical teaching.

Ambulatory care teaching:

This clinical teaching is based on outpatient profiles based on the models of basic and community-based care. Outpatient clinics offer more diverse and effective educational opportunities as it gives students the chance to encounter a wide range of pathologies in several evolutionary phases enhancing the clinical reasoning ability, communication skills and medical-patient relationship.

Topic presentation:

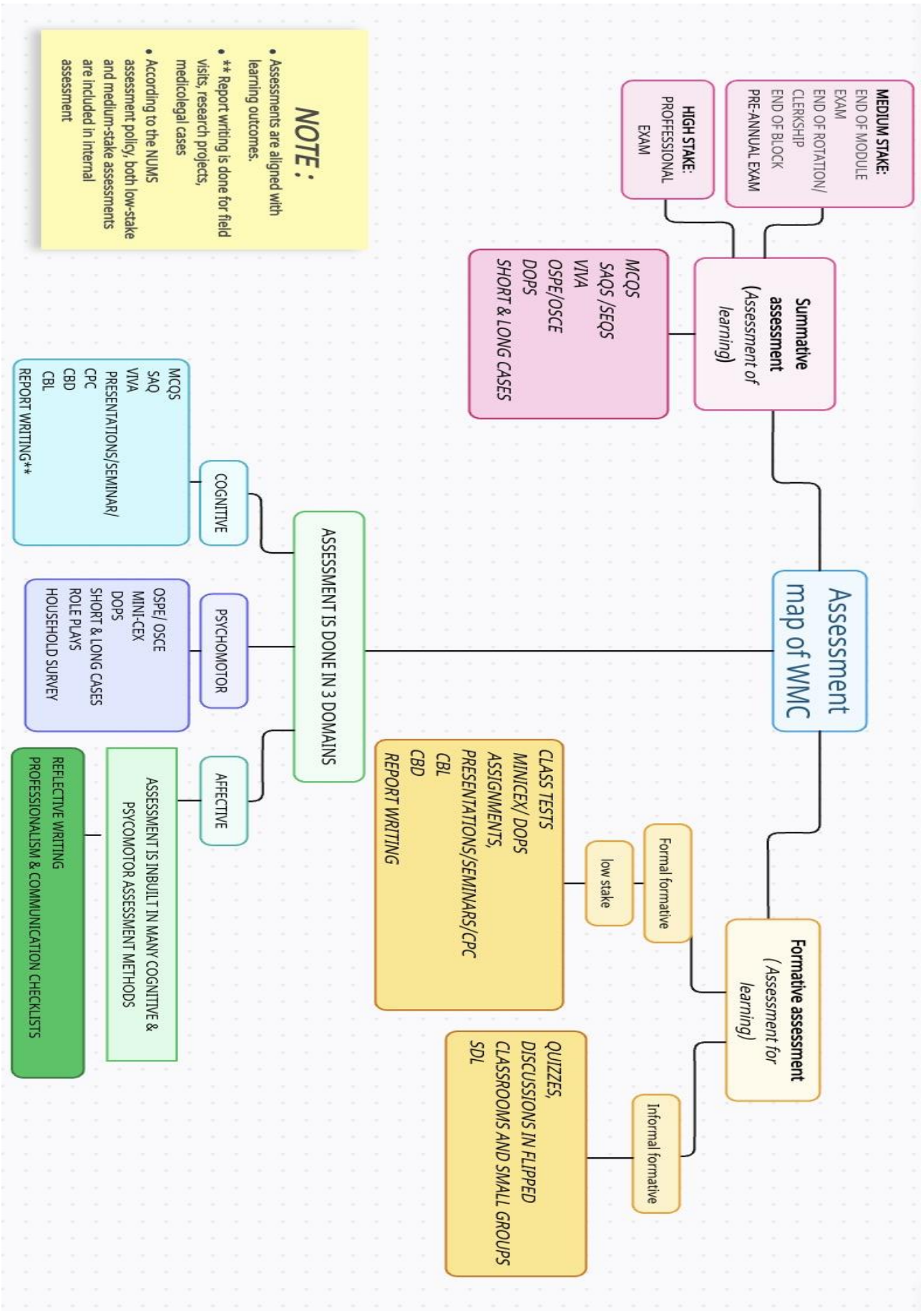
Skill labs:

Structured, hands-on sessions focusing on acquiring and refining essential clinical procedures and practical skills in a safe, simulated environment. Utilizes mannequins, task trainers, and simulated patients to practice technical skills like venipuncture, basic life support, and physical examination techniques on children. Provides immediate feedback and repetition opportunities, ensuring competency before performing procedures on actual patients.

Workshops:

Interactive, small-group sessions dedicated to applying clinical knowledge and developing non-technical skills such as communication, ethics, and critical thinking. Often use role-playing, clinical case discussions, and scenario analysis to address common and complex pediatric problems (e.g., managing fever, interpreting growth charts). Focuses on collaborative problem-solving, decision-making, and integrating theoretical knowledge into practical, real-world clinical contexts.

4. Assessment Map & Strategies



i. Internal Assessment.

- During the clerkships, the students will be continually formatively assessed as explained in the logbooks.
- The weightage of internal assessment will be ~~10~~ 20% in final professional MBBS Examination (as per decision of NUMS).
- There will be end-of-rotation exams at the end of clinical rotation in different units. The assessment strategies include Long and short case assessments, as well as OSCE
- There will be one EOC (theory exam) at the end of each of the two Clerkship Blocks.
- There is also one pre-annual examination, which includes both theoretical and clinical assessments similar to the expected professional exam afterwards.
- The scores of the end-of-rotation and end-of-clerkship assessments, and pre-annual examination will be counted towards the internal assessment as prescribed in the curriculum by the NUMS.

ii. Annual Professional Examination.

- The University will take the final professional Examination as per PM& DC guidelines at the end of the academic year.
- The professional Exam of Pediatrics will be of 200 marks in total, with 100 for the written exam and 100 for the performance examination.
- The pass score will be 50% in theory and practical separately.

5. Clerkship Committee

Chairperson	Prof. Dr. Musarat Ramzan
Coordinators	Medicine: Prof. Dr. Muzamil Jamil Surgery: Dr. Muhammad Azhar Gynecology: Dr. Shabana Kalsoom Pediatrics: Prof. Dr. Sohail Ashraf
Study guide developed by	Department of Medical Education Wah Medical College under the Supervision of **Dr. Memoona Mansoor**

6. Course Content

Medicine

Subject Learning Outcomes

- Diagnose common medical conditions, suggest and formulate appropriate investigations, rationalize treatment plan and, if appropriate, refer the patient for specialist opinion/management. (PLO 1, 6, 7)
- Suggest preventive measures for common public health problems in the community. (PLO 5)
- Perform relevant bedside procedures. (PLO 2, 6)
- Convey relevant information and explanations accurately to patients, families, colleagues and other professionals. (PLO 1, 6, 7)
- Apply medical ethics to medicine and maintain the confidentiality of the patient. (PLO 3)
- Adapt research findings appropriately to the individual patient situation or relevant patient population. (PLO 4, 8)

Knowledge related Learning Outcomes

At the end of this block, the final year student will be able to diagnose patients with cardiac, respiratory, hematological, neurological, renal, gastrointestinal, endocrine and other common medical problems; suggest and interpret appropriate investigations; and rationalize the treatment plan and, if appropriate, refer the patient for specialist opinion/management.

Skill related Learning Outcomes

Each student completing a medical ward rotation should be able to:

- Take and write a clinical history properly and conduct a routine detailed clinical examination.
- Show empathy while examining the patient and respect the patient's right to consent and privacy.
- Present the history and findings in logical order, verbally and in written form.
- Make a differential diagnosis list, formulate relevant investigations and outline the basic management plan.
- Communicate with patients/relatives about the disease and basic management plan.
- Identify routine medical emergencies and react accordingly; consult appropriately with medical, nursing and other colleagues.
- Perform / describe basic medical procedures. (Details of skill-related outcomes can be found in the Medicine Logbooks.)

6.1 Unit I – Morning Sessions

General Medicine, Nephrology and Gastroenterology rotations

Long Case				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
1	**Acute Myocardial Infarction (AMI)**	Long Case	Prof. Dr. Muzamil Jamil	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Diagnose acute MI based on history, ECG changes and cardiac biomarkers. • Outline emergency management and reperfusion therapy. • Identify complications and plan secondary prevention.				
2	**COPD / Asthma**	Long Case	Prof. Dr. Muzamil Jamil	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Differentiate COPD from bronchial asthma on history, examination and spirometry. • Assess severity and identify precipitating factors of exacerbation. • Outline management and patient education (inhaler use, smoking cessation, vaccination).				
3	**Anemia**	Long Case	Prof. Dr. Muzamil Jamil	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Classify anemia morphologically and etiologically. • Identify the clinical features and plan investigations to find the cause. • Outline treatment of common anemias (iron deficiency, B12/folate deficiency, anemia of chronic disease).				

4	**Approach to a Patient with Chronic Diarrhea**	Long Case	Prof. Dr. Muzamil Jamil	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Define chronic diarrhea and differentiate osmotic, secretory and inflammatory types. • Plan investigations to determine the cause. • Outline management and nutritional support.				
5	**Nephritic Syndrome**	Long Case	Dr. Khalil Ur Rehman	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Define nephritic syndrome and list its causes (post-streptococcal GN, IgA nephropathy, lupus nephritis). • Identify clinical features and interpret urine and serological findings. • Outline management and complications.				
6	**Patient with periorbital puffiness / Nephrotic Syndrome**	Long Case	Dr. Ali Riaz	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Approach a patient with periorbital puffiness and differentiate renal from non-renal causes. • Define nephrotic syndrome and identify its causes and complications. • Plan investigations including 24-hour urine protein and renal biopsy, and outline management.				

7	**AKI**	Long Case	Dr. Ali Riaz	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Diagnose the patient on the basis of history and examination.
- Determine the cause of AKI and differentiate pre-renal, renal and post-renal causes.
- Enlist common nephrotoxic medications and advise relevant investigations.
- Devise a management plan, propose preventive measures and suggest treatment of complications.

8	**CRF**	Long Case	Dr. Khalil Ur Rehman	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Define chronic renal failure and enumerate its common causes.
- Identify clinical features and complications (anemia, bone disease, hyperkalemia, acidosis).
- Outline conservative management and indications for renal replacement therapy.

9	**CKD**	Long Case	Dr. Khalil Ur Rehman	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Define and stage chronic kidney disease (KDIGO).
- Plan investigations and identify progression risk factors.
- Outline measures to slow progression and manage complications.

10	**Stroke**	Long Case	Prof. Dr. Muzamil Jamil	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Differentiate ischemic from hemorrhagic stroke and localise the lesion clinically.
- Plan urgent investigations (CT/MRI, carotid, ECG, echo).
- Outline acute management, rehabilitation and secondary prevention.

11	**Congestive Cardiac Failure (CCF)**	Long Case	Prof. Dr. Muzamil Jamil	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Diagnose congestive cardiac failure and identify its underlying cause and precipitants.
- Interpret relevant investigations (ECG, chest X-ray, echo, BNP).
- Outline treatment including diuretics, ACE inhibitors, beta-blockers and lifestyle measures.

12	**Diabetes**	Long Case	Prof. Dr. Muzamil Jamil	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Define and classify diabetes mellitus and state diagnostic criteria.
- Assess glycemic control and screen for complications.
- Outline lifestyle, oral drug and insulin management.

13	**Liver Cirrhosis / Ascites**	Long Case	Dr. Noreen Adil	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Identify the causes and clinical features of cirrhosis and portal hypertension.
- Interpret liver function tests, ascitic fluid analysis and imaging.
- Outline management of ascites and complications (SBP, varices, encephalopathy, hepatorenal syndrome).

14	**GI Bleed (Upper and Lower)**	Long Case	Dr. Noreen Adil	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Identify the causes of upper and lower GI bleeding.
- Assess hemodynamic status and risk-stratify the patient.
- Outline resuscitation, endoscopic and pharmacological management.

15	**Malabsorption**	Long Case	Dr. Noreen Adil	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Enumerate causes of malabsorption (celiac disease, pancreatic insufficiency, bacterial overgrowth).
- Identify clinical features and nutritional deficiencies.
- Plan investigations and outline management.

16	**Dyspepsia / GI Malignancy**	Long Case	Dr. Noreen Adil	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Differentiate functional from organic dyspepsia and identify alarm features.
- Outline investigations (endoscopy, H. pylori testing) and management.
- Recognise presentation of GI malignancy and plan referral.

Short Case				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
17	**CVS Examination – I**	Short Case	Dr. Farhan Ul Haq	Should Know
Learning Outcomes: • Perform a systematic examination of the cardiovascular system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: pulse, BP, JVP, apex beat, heart sounds and murmurs. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
18	**Pleural Effusion**	Short Case	Dr. Kanwal Shahid	Should Know
Learning Outcomes: • Elicit the clinical signs of pleural effusion (stony dull percussion, reduced breath sounds, reduced fremitus). • Differentiate transudate from exudate and list common causes. • Outline investigations and management including aspiration.				
19	**Chest Examination**	Short Case	Dr. Rubaba Khan	Should Know
Learning Outcomes: • Perform a systematic examination of the chest with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: expansion, percussion note, breath sounds, added sounds and vocal resonance. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

20	**Examination of Abdomen**	Short Case	Dr. Rubaba Khan	Should Know
Learning Outcomes: • Perform a systematic examination of the abdomen with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: organomegaly, ascites, masses, tenderness and bowel sounds. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
21	**Precordial Examination**	Short Case	Dr. Kanwal Shahid	Should Know
Learning Outcomes: • Perform a systematic examination of the precordium with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: apex beat, thrills, heart sounds and murmurs. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
22	**GPE of a Patient with Nephrotic Syndrome**	Short Case	Dr. Mubeena Zafar	Should Know
Learning Outcomes: • Perform the general physical examination in a patient with nephrotic syndrome (edema, ascites, blood pressure). • Identify complications and signs of the underlying cause. • Present findings and formulate a diagnosis.				
23	**CRF**	Short Case	Dr. Farhan Nazir	Should Know
Learning Outcomes: • Define chronic renal failure and enumerate its common causes. • Identify clinical features and complications (anemia, bone disease, hyperkalemia, acidosis). • Outline conservative management and indications for renal replacement therapy.				

24	**Dengue Fever**	Short Case	Dr. Rubaba Khan	Should Know
Learning Outcomes: • Identify clinical features and phases of dengue fever (febrile, critical, recovery). • Recognise warning signs of severe dengue and interpret platelet count and hematocrit. • Outline fluid management and monitoring.				
25	**Examination of Rheumatological Manifestations in SLE / RA Patients**	Short Case	Dr. Farhan Ul Haq	Should Know
Learning Outcomes: • Examine joints (inspection, palpation, range of movement) systematically. • Identify extra-articular manifestations of SLE and rheumatoid arthritis. • Formulate a diagnosis and plan investigations.				
26	**Motor System**	Short Case	Dr. Kanwal Shahid	Should Know
Learning Outcomes: • Perform a systematic examination of the motor system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: bulk, tone, power, reflexes and plantar responses. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
27	**Diabetes in Pregnancy**	Short Case	Dr. Kanwal Shahid	Should Know
Learning Outcomes: • Differentiate pre-existing diabetes from gestational diabetes. • Describe maternal and fetal risks. • Outline glycemic targets and treatment (insulin) during pregnancy.				

28	**Pain Abdomen**	Short Case	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Take a focused history of abdominal pain and identify its likely source. • Perform an abdominal examination for tenderness, guarding and organomegaly. • Plan investigations and initial management.				
29	**Examination of Abdomen & Relevant GPE**	Short Case	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Perform the general physical examination relevant to abdominal disease (anemia, jaundice, clubbing, spider naevi, edema). • Perform a systematic abdominal examination. • Integrate the findings into a diagnosis.				
30	**Examination of a patient with Jaundice**	Short Case	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Identify jaundice and differentiate hemolytic, hepatocellular and obstructive types clinically. • Look for stigmata of chronic liver disease and for hepatomegaly, splenomegaly and a palpable gallbladder. • Plan investigations (LFTs, ultrasound) and outline management.				

SGD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
31	**ITP**	SGD	Dr. Farhan Ul Haq; Dr. Rubaba Khan	Should Know
Learning Outcomes: • Define immune thrombocytopenic purpura and describe its pathophysiology. • Identify clinical features and differentiate it from other causes of thrombocytopenia. • Outline management (steroids, IVIG, splenectomy, TPO agonists).				
32	**Multiple Myeloma**	SGD	Dr. Sohaib Ahmed	Should Know
Learning Outcomes: • Define the pathological basis of multiple myeloma. • Classify stages based on clinical presentation. • Justify the role of laboratory investigations and various treatment options.				
33	**Hemoglobinopathies: Thalassemia / Sickle Cell Disease**	SGD	Dr. Sohaib Ahmed	Should Know
Learning Outcomes: • Classify hemoglobinopathies based on abnormalities in the structure and formation of Hb. • Differentiate between hemoglobinopathies on characteristic features, signs and symptoms. • Devise a management plan based on diagnosis, investigations and treatment.				

34	**Hyperthyroidism**	SGD	Dr. Farhan Ul Haq	Should Know
Learning Outcomes: • Enumerate the causes of hyperthyroidism (Graves' disease, toxic nodule, thyroiditis). • Identify clinical features and interpret thyroid function tests. • Outline antithyroid drug, radioiodine and surgical treatment, and recognise thyroid storm.				
35	**CML**	SGD	Dr. Sohaib Ahmed	Should Know
Learning Outcomes: • Describe the pathogenesis of chronic myeloid leukemia (Philadelphia chromosome, BCR-ABL). • Diagnose the disease and its phases (chronic, accelerated, blast). • Propose appropriate investigations and treatment (tyrosine kinase inhibitors).				
36	**UTI**	SGD	Dr. Mubeena Zafar	Should Know
Learning Outcomes: • Classify urinary tract infections (cystitis, pyelonephritis, complicated, recurrent). • Interpret urine analysis and culture. • Outline antibiotic choice and preventive measures.				
37	**CRF**	SGD	Dr. Mubeena Zafar	Should Know
Learning Outcomes: • Define chronic renal failure and enumerate its common causes. • Identify clinical features and complications (anemia, bone disease, hyperkalemia, acidosis). • Outline conservative management and indications for renal replacement therapy.				

38	**Renal Transplant**	SGD	Dr. Ali Riaz	Could Know

Learning Outcomes:

- State the indications and contraindications for renal transplantation.
- Describe immunosuppression and the types of graft rejection.
- Outline early and late post-transplant complications.

39	**RTA**	SGD	Dr. Ali Riaz	Should Know

Learning Outcomes:

- Describe how to approach a patient with metabolic acidosis.
- Differentiate high from normal anion gap acidosis and identify types of renal tubular acidosis.
- Enlist causes, advise relevant investigations and devise a management plan.

40	**Electrolyte Imbalance & Acid-Base Balance (with Physiology Content)**	SGD	Dr. Ali Riaz	Should Know

Learning Outcomes:

- Revise the physiology of sodium, potassium, calcium and acid-base regulation.
- Make a prompt diagnosis of common electrolyte and acid-base disorders and enlist their etiologies.
- Outline management and anticipate complications.

41	**Pituitary Disorders**	SGD	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Discuss functions of anterior and posterior pituitary hormones; identify hypopituitarism and hyperpituitarism.
- Describe the diagnosis of acromegaly and growth hormone deficiency, including OGTT, GH levels and neuroimaging.
- Correlate pathophysiology of diabetes insipidus/SIADH with clinical manifestations and outline management.

42	**Status Epilepticus**	SGD	Dr. Farhan Ul Haq	Must Know
Learning Outcomes: • Define status epilepticus and list its common causes. • Outline the stepwise emergency management (benzodiazepines, second-line antiepileptics). • Identify and manage complications and refractory status.				
43	**Cranial Nerves**	SGD	Dr. Rubaba Khan	Should Know
Learning Outcomes: • Describe the course and functions of the cranial nerves. • Demonstrate the clinical examination of each nerve. • Localise common lesions (e.g., III, VI, VII palsies).				
44	**Scleroderma / Polymyositis**	SGD	Dr. Rifat Yasmin	Could Know
Learning Outcomes: • Identify the clinical features of systemic sclerosis and inflammatory myopathy. • Select investigations (ANA, anti-Scl-70, CK, EMG, biopsy). • Outline management and monitoring of complications.				
45	**Hepatic encephalopathy**	SGD	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Correlate the causes and pathology of hepatic encephalopathy to its clinical features. • Enlist precipitating causes and grade the encephalopathy. • Outline management and suggest preventive measures.				
46	**Pancreatitis**	SGD	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Elaborate the pathophysiology of acute and chronic pancreatitis. • Diagnose on the basis of signs, symptoms and investigations and grade severity. • Outline the treatment plan and enlist complications.				

47	**Inflammatory Bowel Disease**	SGD	Dr. Khalid Bilal Khan	Should Know
Learning Outcomes: • Identify types of inflammatory bowel disease (Crohn's disease, ulcerative colitis) based on clinical features. • Suggest relevant investigations. • Outline the management plan.				
48	**Data Interpretation of Ascitic Fluid**	SGD	Dr. Rida Hanif	Should Know
Learning Outcomes: • Interpret ascitic fluid analysis (SAAG, protein, cell count, culture). • Differentiate transudative from exudative ascites and diagnose SBP. • Relate results to etiology and management.				
49	**Metabolic Liver Disease: Wilson's Disease & Hemochromatosis**	SGD	Dr. Khalid Bilal Khan	Could Know
Learning Outcomes: • Describe the pathogenesis of Wilson's disease and hereditary hemochromatosis. • Identify clinical features and diagnostic tests (ceruloplasmin, ferritin, transferrin saturation). • Outline treatment and screening of family members.				
50	**Interpretation of Investigations in GI, Liver & Pancreatic Disorders**	SGD	Dr. Noreen Adil	Should Know
Learning Outcomes: • Interpret liver function tests, viral serology and pancreatic enzymes. • Recognise patterns of hepatocellular, cholestatic and infiltrative disease. • Select further investigations (imaging, endoscopy) on this basis.				

51	**GI Malignancy**	SGD	Dr. Khalid Bilal Khan	Should Know

Learning Outcomes:

- Identify risk factors and presentation of GI cancers (oesophageal, gastric, colorectal, hepatocellular, pancreatic).
- Outline diagnostic work-up and staging.
- Describe principles of treatment and palliative care.

Clinical Methods				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
52	**GPE of a Patient with Nephritic Syndrome**	Clinical Methods (BST)	Dr. Farhan Nazir	Should Know

Learning Outcomes:

- Perform the general physical examination in a patient with nephritic syndrome (edema, hypertension, hematuria).
- Identify features of the underlying cause and complications.
- Present findings and formulate a diagnosis.

53	**Sensory System**	Clinical Methods (BST)	Dr. Kanwal Shahid	Should Know

Learning Outcomes:

- Perform a systematic examination of the sensory system with consent, privacy and appropriate patient positioning.
- Identify and interpret the key clinical signs: modality loss, dermatomal or glove-and-stocking pattern, and sensory level.
- Present the findings logically and formulate a provisional diagnosis with relevant differentials.

54	**Ascites**	Clinical Methods (BST)	Dr. Khalid Bilal Khan	Should Know

Learning Outcomes:

- Elicit signs of ascites (shifting dullness, fluid thrill).
- Look for the underlying cause (liver, cardiac, renal, malignancy).
- Outline investigations and management.

CBL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
55	**Blood & Blood Product Transfusion and Related Problems**	CBL	Dr. Rifat Yasmin	Must Know

Learning Outcomes:

- Elaborate the prerequisites and modes of transfusion.
- Correlate the pathophysiology of transfusion reactions with safety protocols.
- Describe step-by-step management of the different types of transfusion reactions.

56	**SLE / RA**	CBL	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Identify the diagnostic criteria of SLE and rheumatoid arthritis.
- Suggest investigations and therapeutic options after establishing the diagnosis.
- Suggest management of complications.

57	**Complications of Diabetes**	CBL	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Define and classify diabetes mellitus on the basis of etiology.
- Describe the acute and chronic complications of diabetes and plan their work-up.
- Interpret investigations and outline management of each complication.

Skill Lab				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
58	**Administration of IV, IM & S/C Injections; Drawing of Blood Sample**	Skill Lab	Dr. Kanwal Shahid	Should Know
Learning Outcomes: • Demonstrate the correct technique for IV, IM and subcutaneous injections on a model. • Demonstrate venepuncture and blood sample collection with aseptic technique. • Dispose of sharps safely and obtain patient consent.				
59	**Insertion of NG Tube; Insertion of Airway & Different Oxygen Delivery Systems**	Skill Lab	Dr. Kanwal Shahid	Must Know
Learning Outcomes: • Demonstrate insertion of a nasogastric tube and confirm its position. • Demonstrate insertion of an airway device and use of oxygen delivery systems. • State indications, contraindications and complications.				

OPD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
60	**History, Physical Examination, Diagnosis, Investigations & Management of Medical OPD Patients**	OPD (Clinical Teaching)	Assistant Professor, Medicine	Should Know
Learning Outcomes: • Take a focused history and perform an appropriate examination in an outpatient setting. • Formulate a diagnosis, request relevant investigations and outline management. • Counsel patients and arrange appropriate follow-up or referral.				

CPC				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
61	**AKI**	CPC	All available faculty (facilitators)	Must Know
Learning Outcomes: • Diagnose the patient on the basis of history and examination. • Determine the cause of AKI and differentiate pre-renal, renal and post-renal causes. • Enlist common nephrotoxic medications and advise relevant investigations. • Devise a management plan, propose preventive measures and suggest treatment of complications.				

62	**Malignant Diseases of Breast**	CPC	All available faculty (facilitators)	Should Know

Learning Outcomes:

- Identify risk factors and clinical presentation of breast cancer.
- Correlate clinical, radiological and histopathological findings.
- Outline staging, multimodal treatment and screening.

OSPE				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
63	**Station 01: Drugs**	OSPE Practice	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Identify commonly used medical drugs shown in the station.
- State their class, indications and important adverse effects.
- Describe safe prescribing and administration.

64	**Station 02: ECG**	OSPE Practice	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Interpret common ECG abnormalities (MI, arrhythmias, electrolyte disturbances).
- Correlate ECG with the clinical scenario.
- State the next management step.

65	**Station 03: X-Ray / CT Scan**	OSPE Practice	Dr. Rifat Yasmin	Should Know

Learning Outcomes:

- Identify abnormalities on chest/abdominal X-rays and CT images.
- Correlate findings with the clinical scenario.
- Suggest further investigations or management.

66	**Station 04: Instruments**	OSPE Practice	Dr. Rifat Yasmin	Should Know
Learning Outcomes: • Identify common medical instruments (e.g., LP needle, chest drain, NG tube, tourniquet). • State their uses and complications. • Describe the safe use of each.				
67	**Station 05: Haematology Data Interpretation**	OSPE Practice	Dr. Rifat Yasmin	Should Know
Learning Outcomes: • Interpret CBC, peripheral smear, coagulation and iron profile data. • Reach a diagnosis from the haematological data. • Suggest further investigations and management.				
68	**Station 06: Endocrine Data Interpretation**	OSPE Practice	Dr. Rifat Yasmin	Should Know
Learning Outcomes: • Interpret thyroid, adrenal, pituitary and glycemic investigations. • Reach a diagnosis from the endocrine data. • Suggest further investigations and management.				
69	**Station 07: Patient Safety**	OSPE Practice	Dr. Rifat Yasmin	Must Know
Learning Outcomes: • Apply principles of patient safety (identification, handover, medication safety, falls prevention). • Recognise and report incidents and near-misses. • Communicate effectively within the healthcare team.				

70	**Station 08: Infection Control**	OSPE Practice	Dr. Rifat Yasmin	Must Know
Learning Outcomes: • Demonstrate hand hygiene, PPE use and safe disposal of waste and sharps. • Apply standard and transmission-based precautions. • Explain prevention of healthcare-associated infection.				

Ward Round				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
71	**Nephrology Ward**	Ward Round (BST)	Dr. Khalil Ur Rehman	Should Know
Learning Outcomes: • Take a focused history and examine patients with renal disease. • Interpret renal function tests, urine analysis and fluid balance charts. • Discuss management plans with the team.				
72	**Dialysis**	Ward Round (BST)	Dr. Ali Riaz	Could Know
Learning Outcomes: • State the indications for dialysis and differentiate hemodialysis from peritoneal dialysis. • Describe vascular access and the common complications of dialysis. • Observe the dialysis unit and patient care.				
73	**Gastroenterology Ward**	Ward Round (BST)	Dr. Noreen Adil	Should Know
Learning Outcomes: • Take a focused history and examine patients with GI and liver disease. • Interpret LFTs, endoscopy and imaging reports. • Discuss management plans with the team.				

74	**General Medicine Ward**	Ward Round (BST)	Prof. Dr. Muzamil Jamil	Should Know

Learning Outcomes:

- Take a history, examine and present patients on ward rounds.
- Formulate differential diagnoses and investigation plans.
- Participate in day-to-day patient management and documentation.

Assignment				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
75	**Complications of Acute MI**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know

Learning Outcomes:

- Enumerate the early and late complications of acute MI.
- Describe the clinical features and diagnosis of each.
- Outline management.

76	**Pneumothorax: Causes & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know

Learning Outcomes:

- Classify pneumothorax (spontaneous, traumatic, tension) and list its causes.
- Identify clinical and radiological features.
- Outline management including needle decompression and chest drain.

77	**Hemolytic Anemia: Causes & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know

Learning Outcomes:

- Classify hemolytic anemia (inherited, acquired, immune, non-immune).
- Identify clinical and laboratory features of hemolysis.
- Outline management.

78	**Celiac Disease: Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the pathogenesis and clinical features of celiac disease. • Select diagnostic tests (anti-tTG, duodenal biopsy). • Outline gluten-free diet and follow-up.				
79	**Type II Respiratory Failure**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Define type II respiratory failure and list its causes. • Interpret the arterial blood gas findings. • Outline management including controlled oxygen and NIV.				
80	**Status Epilepticus: Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Describe the clinical features and common causes of status epilepticus. • Outline the stepwise emergency treatment. • Identify complications and measures to prevent recurrence.				
81	**Diabetic Ketoacidosis: Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Describe the clinical features and precipitating factors of DKA. • Interpret the biochemical diagnosis. • Outline fluid, insulin and electrolyte management.				

82	**Complications of Pneumonia including Lung Abscess**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Enumerate the complications of pneumonia (effusion, empyema, abscess, respiratory failure). • Describe clinical features and investigations of lung abscess. • Outline management including drainage.				
83	**ITP: Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the clinical features of ITP. • Select investigations to confirm the diagnosis. • Outline management.				
84	**Pulmonary Tuberculosis: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the clinical features of pulmonary tuberculosis. • Select investigations (sputum smear, GeneXpert, chest X-ray). • Outline anti-tuberculous therapy, adverse effects and prevention.				
85	**Pulmonary Embolism: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Describe the risk factors and clinical features of pulmonary embolism. • Select investigations (D-dimer, CTPA, ECG). • Outline anticoagulation and supportive management.				

86	**Connective Tissue Disorders (SLE & Rheumatoid Arthritis): Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the clinical features of SLE and rheumatoid arthritis. • Interpret relevant serological investigations. • Outline management and monitoring.				
87	**Malaria & Typhoid Fever: Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the clinical features of malaria and typhoid fever. • Select diagnostic tests (blood film/rapid test, blood culture, Widal/typhidot). • Outline treatment, complications and prevention.				
88	**Pyogenic Meningitis: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Describe the clinical features of pyogenic meningitis. • Interpret CSF findings and indications for imaging before lumbar puncture. • Outline empirical antibiotic therapy, adjunctive steroids and prophylaxis.				
89	**Fulminant Hepatic Failure: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Define fulminant hepatic failure and list its causes. • Describe clinical features and investigations. • Outline supportive management and indications for liver transplantation.				

90	**GI Bleed: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Must Know
Learning Outcomes: • Describe clinical features of upper and lower GI bleeding. • Select investigations (endoscopy, colonoscopy, imaging). • Outline resuscitation and specific management.				
91	**Hepatocellular Carcinoma (HCC): Causes, Clinical Features & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Identify the causes and risk factors of hepatocellular carcinoma. • Describe clinical features and diagnosis (AFP, imaging). • Outline treatment options and surveillance.				
92	**Extra-intestinal Manifestations of Ulcerative Colitis**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Enumerate extra-intestinal manifestations (joints, eyes, skin, liver). • Describe their clinical features and relation to disease activity. • Outline investigations and management.				
93	**Metabolic Liver Disease: Clinical Features, Investigations & Management**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know
Learning Outcomes: • Describe the clinical features of metabolic liver diseases (Wilson's disease, hemochromatosis, NAFLD). • Select the diagnostic investigations. • Outline management.				

94	**Complications of Pancreatitis**	Assignment (SDL)	Prof. Muzamil Jamil	Should Know

Learning Outcomes:

- Enumerate the local and systemic complications of pancreatitis.
- Describe clinical features and investigations.
- Outline their management.

6.2 Unit II – Morning Sessions

General Medicine, Neurology and Pulmonology rotations

Long Case				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
95	**Patient with Diabetes & Complications**	Long Case	Dr. Ayesha Rani	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Take a focused history of a diabetic patient and screen for micro- and macrovascular complications. • Examine for neuropathy, retinopathy, nephropathy and diabetic foot. • Plan investigations and outline comprehensive management.				
96	**Patient with Fever & Loose Stools**	Long Case	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Differentiate the infective causes of acute diarrhea with fever (typhoid, bacillary dysentery, amoebiasis, cholera). • Assess hydration status and plan stool and blood investigations. • Outline rehydration, antimicrobial therapy and preventive measures.				
97	**Patient with Syncope**	Long Case	Dr. Saadia Fatima	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Take a focused history of transient loss of consciousness and identify cardiac, reflex and orthostatic causes. • Interpret ECG, orthostatic BP and relevant investigations. • Identify high-risk patients and outline management.				

98	**Patient with Chest Pain & Hemoptysis**	Long Case	Prof. Dr. Asim Ali Shah; Dr. Wajahat Sultan Baig	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Enumerate the causes of chest pain with hemoptysis (pulmonary embolism, tuberculosis, bronchiectasis, carcinoma, pneumonia).
- Take a focused history and examine for supporting signs.
- Plan investigations (chest X-ray, CTPA, sputum, bronchoscopy) and initial management.

99	**Patient with Stroke**	Long Case	Dr. Junaid Ur Rehman	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Localise the lesion in a patient with stroke and differentiate ischemic from hemorrhagic stroke.
- Plan urgent imaging and investigate for the cause.
- Outline acute management, rehabilitation and secondary prevention.

100	**Patient with Headache**	Long Case	Dr. Junaid Ur Rehman	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Classify headaches into primary and secondary types.
- Identify red-flag features requiring urgent investigation.
- Outline investigations and management of migraine, tension-type and cluster headache.

101	**Patient with Epilepsy**	Long Case	Dr. Junaid Ur Rehman	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Classify seizures and take a witness-based history.
- Plan investigations (EEG, imaging, labs) to determine cause.
- Outline antiepileptic therapy, counseling and driving/safety advice.

102	**patient with Joint Pains**	Long Case	Prof. Dr. Asim Ali Shah	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Differentiate inflammatory from degenerative and crystal arthropathies on history and examination.
- Plan investigations (ESR, RF, anti-CCP, ANA, uric acid, joint fluid analysis, imaging).
- Outline management of rheumatoid arthritis, osteoarthritis and gout.

103	**Patient with Fever & Cough**	Long Case	Dr. Ayesha Rani	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Take a history of fever with cough and identify features of pneumonia, tuberculosis and other infections.
- Plan investigations (chest X-ray, sputum, CBC, cultures).
- Outline empirical treatment and indications for admission.

104	**Patient with Limb Weakness**	Long Case	Dr. Saadia Fatima	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Differentiate upper from lower motor neuron weakness and localise the lesion.
- Plan investigations (imaging, NCS/EMG, labs) according to the pattern.
- Outline management of common causes (stroke, GBS, myopathy, cord lesions).

105	**Patient with Altered State of Consciousness**	Long Case	Dr. Wajahat Sultan Baig	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Assess the level of consciousness using the Glasgow Coma Scale.
- Enumerate metabolic, toxic, structural and infective causes.
- Outline immediate stabilization and investigation.

106	**Patient with Shortness of Breath**	Long Case	Dr. Wajahat Sultan Baig	Should Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Differentiate cardiac, pulmonary and other causes of dyspnea.
- Plan bedside and laboratory investigations (ECG, X-ray, ABGs, echo, spirometry).
- Outline initial management.

107	**Pneumonia**	Long Case	Dr. Sidla Rehman	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Classify pneumonia (community-, hospital-acquired and aspiration) and identify likely pathogens.
- Diagnose by clinical, radiological and microbiological findings and assess severity.
- Outline antibiotic therapy and complications.

108	**Discussion of a Case of Bronchial Asthma**	Long Case	Dr. Abidain Haider	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Describe the clinical features and severity grading of bronchial asthma. • Explain the role of spirometry, peak flow and reversibility testing. • Outline stepwise management and patient education.				
109	**Patient with Cough**	Long Case	Dr. Marzia Sheharbano	Should Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Classify cough (acute, subacute, chronic) and list its causes. • Identify red flags (hemoptysis, weight loss, night sweats). • Plan investigations and outline management.				

Short Case				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
110	**Examination of Front of Chest**	Short Case	Dr. Sidla Rehman	Should Know
Learning Outcomes: • Perform a systematic examination of the front of the chest with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: tracheal position, chest expansion, percussion note, breath sounds and added sounds. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

111	**Interpretation of Chest X-ray**	Short Case	Dr. Abidain Haider	Should Know

Learning Outcomes:

- Apply a systematic approach to chest X-ray interpretation.
- Identify consolidation, collapse, effusion, pneumothorax, masses and cardiomegaly.
- Correlate findings with the clinical presentation.

SGD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
112	**Carcinoma of Bronchus**	SGD	Dr. Javeria	Should Know

Learning Outcomes:

- Identify the risk factors and histological types of bronchogenic carcinoma.
- Describe local, metastatic and paraneoplastic manifestations.
- Outline the diagnostic work-up, staging and treatment options.

113	**Medical Radiology**	SGD	Dr. Saadia Fatima	Could Know

Learning Outcomes:

- Describe the principles and indications of common radiological investigations (X-ray, ultrasound, CT, MRI).
- Interpret basic radiographs relevant to medicine.
- Select appropriate imaging for a clinical problem and understand radiation safety.

114	**PUO**	SGD	Dr. Wajahat Sultan Baig	Should Know

Learning Outcomes:

- Define pyrexia of unknown origin and classify it.
- Enumerate infective, malignant and inflammatory causes.
- Plan a stepwise diagnostic approach and outline management.

115	**CNS: Cranial Nerves (with Videos)**	SGD	PG Neurology	Should Know
Learning Outcomes: • Demonstrate the examination of the cranial nerves using video demonstrations. • Identify common cranial nerve palsies. • Localise lesions based on the pattern of involvement.				
116	**CNS Infections / Meningitis / Brain Abcess**	SGD	Dr. Junaid Ur Rehman	Must Know
Learning Outcomes: • Differentiate among the infections of the CNS based on etiology and clinical features. • Outline the modalities for investigation and medical management of CNS infections. • Identify complications and treat them, and advocate preventive strategies.				
117	**Examination of Motor System + Mini-CEX**	SGD	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Perform a systematic motor system examination (bulk, tone, power, reflexes, coordination). • Differentiate upper from lower motor neuron signs. • Present the findings and be assessed by Mini-CEX.				
118	**Guillain-Barré Syndrome (GBS)**	SGD	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Describe the pathogenesis and clinical features of GBS. • Select investigations (CSF albumino-cytological dissociation, nerve conduction studies). • Outline management (IVIG/plasmapheresis, supportive care) and monitoring of respiratory function.				

119	**Examination of Gait & Cerebellum**	SGD	Dr. Hafsa	Should Know
Learning Outcomes: • Perform a systematic examination of the gait and cerebellar system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: gait pattern, ataxia, nystagmus, tremor and dysdiadochokinesia. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
120	**Paraplegia**	SGD	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Diagnose paraplegia based on its etiological and clinical features. • Devise an investigation plan (MRI spine, CSF). • Suggest treatment options and rehabilitation.				
121	**Sensory System – I**	SGD	Dr. Hafsa	Should Know
Learning Outcomes: • Describe the sensory pathways and dermatomes. • Demonstrate the examination of the different sensory modalities. • Localise sensory deficits.				
122	**Infection Control**	SGD	Dr. Saadia Fatima	Must Know
Learning Outcomes: • Apply the principles of infection control to ensure patient safety. • Demonstrate hand hygiene and the appropriate use of PPE. • Describe standard precautions, isolation and waste management.				

123	**Myasthenia Gravis**	SGD	Dr. Umer Farooq	Should Know

Learning Outcomes:

- Describe the pathophysiological basis of myasthenia gravis.
- Identify clinical features and differentiate it from muscular dystrophy.
- Diagnose (antibodies, edrophonium/ice-pack test, EMG) and develop a management plan including recognition of myasthenic crisis.

124	**Method & Interpretation of ABGs**	SGD	Dr. Sidla Rehman	Must Know

Learning Outcomes:

- Describe the method of arterial blood sampling and precautions.
- Interpret ABGs systematically to identify respiratory and metabolic disorders and compensation.
- Correlate results with clinical conditions.

125	**GPE Relevant to Pulmonology**	SGD	PG (Unit III)	Should Know

Learning Outcomes:

- Examine general signs relevant to respiratory disease (clubbing, cyanosis, lymphadenopathy, respiratory rate, JVP, edema).
- Interpret these signs in the clinical context.
- Integrate findings into a diagnostic assessment.

126	**Non-resolving Pneumonia (Lung Abscess, Bronchiectasis etc.)**	SGD	Dr. Abidain Haider	Must Know

Learning Outcomes:

- Enumerate the causes of non-resolving pneumonia.
- Analyze the etiology and pathogenesis of lung abscess and bronchiectasis and diagnose them clinically, radiologically and by laboratory tests.
- Develop a plan for drug therapy, drainage, physiotherapy and surgical intervention.

127	**Bronchogenic Carcinoma**	SGD	Dr. Abidain Haider	Should Know

Learning Outcomes:

- Describe the clinical presentation, types and paraneoplastic syndromes.
- Outline investigations (chest imaging, bronchoscopy, biopsy) and staging.
- Describe treatment options and palliative care.

SDL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
128	**Data Interpretation: Pleural Fluid Examination**	SDL	Dr. Marzia Sheharbano	Should Know

Learning Outcomes:

- Interpret pleural fluid analysis using Light's criteria.
- Differentiate transudative from exudative effusions and identify their causes.
- Correlate results with the clinical diagnosis.

129	**Management of Rheumatoid Arthritis**	SDL	Self-directed (assignment)	Should Know

Learning Outcomes:

- Describe the clinical diagnosis of rheumatoid arthritis (ACR/EULAR criteria).
- Outline symptomatic therapy and DMARDs.
- Describe monitoring and extra-articular complications.

130	**Management of Acute Gout**	SDL	Self-directed (assignment)	Should Know

Learning Outcomes:

- Describe the clinical features and diagnosis of acute gout.
- Outline acute treatment (NSAIDs, colchicine, steroids).
- Describe long-term urate-lowering therapy and lifestyle advice.

131	**Management of Addison's Disease**	SDL	Self-directed (assignment)	Should Know
Learning Outcomes: • Describe the causes and clinical features of adrenal insufficiency. • Select diagnostic tests (morning cortisol, ACTH stimulation). • Outline glucocorticoid replacement and management of adrenal crisis.				
132	**Approach to a Patient with Hypertension**	SDL	Self-directed (assignment)	Must Know
Learning Outcomes: • Classify hypertension and take a focused history for secondary causes. • Assess target-organ damage and plan investigations. • Outline lifestyle and pharmacological management.				
133	**Hyperkalemia & Its Management**	SDL	Self-directed (assignment)	Must Know
Learning Outcomes: • Enumerate the causes and clinical/ECG features of hyperkalemia. • Outline emergency treatment (calcium, insulin-dextrose, salbutamol, resins, dialysis). • Identify and correct the underlying cause.				
134	**Management of Shock**	SDL	Self-directed (assignment)	Must Know
Learning Outcomes: • Classify shock and recognise its clinical features. • Outline resuscitation principles specific to each type. • Describe monitoring and treatment of the underlying cause.				

135	**CLL**	SDL	Self-directed (assignment)	Should Know
Learning Outcomes: • Describe the pathophysiology and clinical features of chronic lymphocytic leukemia. • Interpret blood and flow cytometry findings and staging (Rai/Binet). • Outline treatment indications and options.				
136	**ITP & Its Management**	SDL	Self-directed (assignment)	Should Know
Learning Outcomes: • Define ITP and describe its clinical presentation. • Outline investigations to confirm the diagnosis. • Describe first- and second-line management.				
137	**Bronchial Asthma & Its Management**	SDL	Self-directed (assignment)	Must Know
Learning Outcomes: • Describe the pathophysiology and clinical features of bronchial asthma. • Grade severity and identify precipitating factors. • Outline stepwise management and management of acute severe asthma.				
138	**Clinical Presentation & Signs in Chronic Anemia**	SDL	Self-directed (assignment)	Must Know
Learning Outcomes: • Describe the symptoms and signs of chronic anemia (pallor, koilonychia, glossitis, flow murmur). • Differentiate the types of anemia clinically. • Plan investigations to identify the cause.				

Clinical Methods				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
139	**Orientation**	Clinical Methods (BST)	Dr. Wajahat Sultan Baig	Could Know
Learning Outcomes: • Describe the structure, schedule and expectations of the clinical rotation. • Identify the learning resources, logbook and assessment methods. • Observe ward etiquette and professional behavior.				
140	**General Physical Examination**	Clinical Methods (BST)	Dr. Marzia Sheharbano	Should Know
Learning Outcomes: • Perform a complete general physical examination. • Recognise the clinical significance of abnormal findings. • Demonstrate professionalism, empathy and respect for the patient's privacy.				
141	**Examination of Cranial nerves**	Clinical Methods (BST)	Dr. Jia	Should Know
Learning Outcomes: • Perform a systematic examination of the cranial nerves with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: deficits of nerves I–XII and their localising value. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

142	**Examination of Lymph Nodes**	Clinical Methods (BST)	Dr. Javeria; Dr. Atique Ur Rehman (Oncology)	Should Know
Learning Outcomes: • Examine all superficial lymph node groups systematically. • Describe the size, consistency, tenderness and fixity of nodes. • Differentiate infective, reactive and malignant lymphadenopathy and plan investigations.				
143	**Cranial Nerves**	Clinical Methods (BST)	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Describe the course and functions of the cranial nerves. • Demonstrate the clinical examination of each nerve. • Localise common lesions (e.g., III, VI, VII palsies).				
144	**Sensory System – II + Mini-CEX**	Clinical Methods (BST)	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Perform a complete sensory system examination. • Identify patterns of sensory loss (peripheral, spinal, central) and localise the lesion. • Present findings and be assessed by Mini-CEX.				
145	**Examination of Precordium**	Clinical Methods (BST)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Perform a systematic examination of the precordium with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: apex beat, thrills, heart sounds and murmurs. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

146	**Examination of Chest**	Clinical Methods (BST)	Dr. Wajahat Sultan Baig	Should Know

Learning Outcomes:

- Perform a systematic examination of the chest with consent, privacy and appropriate patient positioning.
- Identify and interpret the key clinical signs: expansion, percussion, breath sounds and added sounds.
- Present the findings logically and formulate a provisional diagnosis with relevant differentials.

Skill Lab				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
147	**Lumbar Puncture**	Skill Lab	Dr. Fareeha; Dr. Umer Farooq	Should Know

Learning Outcomes:

- State the indications, contraindications and complications of lumbar puncture.
- Demonstrate the procedure on a model with aseptic technique and consent.
- Interpret CSF findings in meningitis and other CNS conditions.

148	**IV / IM Injection**	Skill Lab	Dr. Hamza; Dr. Aneesa	Should Know

Learning Outcomes:

- Demonstrate correct technique for intravenous and intramuscular injections.
- Observe aseptic technique and safe sharps disposal.
- Recognise and manage complications.

OPD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
149	**History, Physical Examination, Diagnosis, Investigations & Management of Common Neurology Patients**	OPD (Clinical Teaching)	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Take a focused neurological history and perform an appropriate examination. • Formulate a diagnosis and request relevant investigations. • Outline management and counsel patients with common neurological problems.				
150	**Discussion of Cases of Bronchial Asthma, COPD & Miscellaneous Diseases**	OPD (Clinical Teaching)	Dr. Abidain Haider	Must Know
Learning Outcomes: • Take a focused respiratory history and examine outpatients. • Interpret spirometry and chest imaging. • Outline management and patient counseling.				

Ward Round				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
151	**Neurology Ward**	Ward Round (BST)	Dr. Junaid Ur Rehman	Should Know
Learning Outcomes: • Take a focused history and perform a neurological examination on ward patients. • Localise the lesion and formulate a differential diagnosis. • Discuss investigations and management with the team.				

152	**Pulmonology Ward**	Ward Round (BST)	Dr. Abidain Haider	Should Know

Learning Outcomes:

- Take a focused history and perform a respiratory examination on ward patients.
- Interpret chest imaging, ABGs and sputum results.
- Discuss management plans with the team.

Instruments Use				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
153	**Oxygen Therapy / Inhaler Devices / PEFR / Spirometer**	Demonstration	Dr. Abidain Haider	Should Know

Learning Outcomes:

- Demonstrate oxygen delivery devices and their selection.
- Demonstrate correct inhaler technique, peak-flow measurement and the principles of spirometry.
- Interpret basic PEFR and spirometry results.

Assignment				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
154	**Thyrotoxicosis: Clinical Manifestations**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know

Learning Outcomes:

- Enumerate the causes of thyrotoxicosis.
- Describe its symptoms and signs including ophthalmic and thyroid-storm features.
- Recognise cardiovascular and metabolic complications.

155	**Thyrotoxicosis: Investigations & Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Interpret thyroid function tests and select further investigations (antibodies, uptake scan). • Outline antithyroid, radioiodine and surgical options. • Describe management of thyroid storm.				
156	**Hypothyroidism: Clinical Features**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Enumerate the causes of hypothyroidism. • Describe its symptoms and signs including myxedema. • Recognise complications such as myxedema coma.				
157	**Hypothyroidism: Investigations & Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Interpret thyroid function tests and antibodies. • Outline levothyroxine therapy and monitoring. • Describe management of myxedema coma.				
158	**Addison's Disease**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Describe the causes and clinical features of Addison's disease. • Select diagnostic investigations. • Outline replacement therapy and management of adrenal crisis.				

159	**GBS: Clinical Features & Investigations**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Describe the clinical features and course of GBS. • Interpret CSF and nerve conduction findings. • Identify features of impending respiratory failure.				
160	**GBS: Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Outline supportive management including respiratory and autonomic monitoring. • Describe the use of IVIG and plasmapheresis. • Describe rehabilitation and prognosis.				
161	**Parkinson's Disease: Clinical Features & Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Describe the cardinal features of Parkinson's disease (tremor, rigidity, bradykinesia, postural instability). • Differentiate it from other movement disorders (parkinsonism, essential tremor). • Outline pharmacological management (levodopa, dopamine agonists) and its complications.				
162	**Organophosphate Poisoning: Clinical Features & Investigations**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Must Know
Learning Outcomes: • Describe the muscarinic, nicotinic and CNS features of organophosphate poisoning. • Select investigations (serum cholinesterase level). • Identify complications including intermediate syndrome.				

163	**Organophosphate Poisoning: Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Must Know
Learning Outcomes: • Outline decontamination and airway protection. • Describe the use of atropine and pralidoxime. • Describe supportive care and monitoring.				
164	**Acromegaly: Clinical Manifestations**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Could Know
Learning Outcomes: • Describe the pathophysiology and causes of acromegaly. • Identify its clinical features and complications. • Describe the diagnostic work-up (IGF-1, OGTT with GH suppression, MRI).				
165	**Acromegaly: Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Could Know
Learning Outcomes: • Outline surgical (transsphenoidal), medical (somatostatin analogues, dopamine agonists, GH antagonist) and radiotherapy options. • Describe monitoring of treatment response. • Outline management of complications.				
166	**Pleural Effusion: Causes & Clinical Manifestations**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Classify pleural effusion as transudate or exudate and list the common causes. • Describe clinical features and examination findings. • Describe radiological features.				

167	**Pleural Effusion: Investigations & Management**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Select investigations (chest X-ray, ultrasound, pleural tap, pleural biopsy). • Outline therapeutic aspiration, chest drain and pleurodesis. • Treat the underlying cause.				
168	**Pleural Effusion: Data Interpretation**	Assignment (SDL)	Dr. Wajahat Sultan Baig	Should Know
Learning Outcomes: • Interpret pleural fluid biochemistry, cytology and microbiology. • Apply Light's criteria. • Correlate results with etiology.				

6.3 Unit I – Evening Sessions

Clinical Methods				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
169	**General Physical Examination (GPE) & Videos**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a complete general physical examination (build, nutrition, pallor, icterus, cyanosis, clubbing, edema, lymph nodes, vitals). • Recognise the clinical significance of abnormal general signs. • Demonstrate a professional, empathetic approach while examining the patient.				
170	**Anterior Part of the Chest & Videos**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the anterior chest with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: inspection, palpation, percussion and auscultation findings; added sounds and chest-wall abnormalities. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
171	**Posterior Part of the Chest**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the posterior chest with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: tracheal position, expansion, vocal fremitus, percussion note, breath sounds and vocal resonance. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

172	**Abdomen & Videos**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the abdomen with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: distension, organomegaly, tenderness, masses, ascites and bowel sounds. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
173	**CVS Examination**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the cardiovascular system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: pulse, JVP, apex beat, heart sounds and murmurs. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
174	**Cranial Nerve examination**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the cranial nerves with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: deficits of nerves I–XII and their localising value. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

175	**Motor system examination of lower limbs**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the lower limb motor system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: bulk, tone, power, reflexes, plantar response and gait. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
176	**Motor system examination of upper limbs**	Clinical Methods (BST)	PG (Medical Unit I)	Must Know
Learning Outcomes: • Perform a systematic examination of the upper limb motor system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: bulk, tone, power, reflexes and coordination. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				
177	**Cerebellar examination**	Clinical Methods (BST)	PG (Medical Unit I)	Should Know
Learning Outcomes: • Perform a systematic examination of the cerebellar system with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: nystagmus, intention tremor, dysdiadochokinesia, past-pointing, ataxic gait and hypotonia. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

Other Topics				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
178	**Interpretation of X-Rays**	SGD	PG (ICU)	Should Know
Learning Outcomes: • Apply a systematic approach (ABCDE) to reading a chest X-ray. • Identify common abnormalities such as consolidation, effusion, pneumothorax, cardiomegaly and pulmonary edema. • Correlate radiological findings with the clinical picture.				
179	**Interpretation of Common Lab Data**	SGD	PG (ICU)	Should Know
Learning Outcomes: • Interpret CBC, renal function, liver function, electrolytes and blood glucose results. • Correlate abnormal laboratory values with likely clinical conditions. • Decide on appropriate next-step investigations.				
180	**Interpretation of ABGs**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Describe the normal values of arterial blood gases. • Interpret ABGs step by step to identify acid-base disorders and compensation. • Relate the disturbance to its clinical cause and outline initial management.				
181	**CAP / VAP**	SGD	PG (ICU)	Should Know
Learning Outcomes: • Differentiate community-acquired from ventilator-associated pneumonia. • Apply severity scoring (CURB-65) and select appropriate empirical antibiotics. • Outline preventive measures for VAP.				

182	**Management of COPD**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Classify the severity of COPD (GOLD) and its exacerbations. • Outline stable-phase and acute-exacerbation management including controlled oxygen therapy. • Describe indications for NIV and for ICU referral.				
183	**Upper & Lower GI Bleed**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Differentiate upper from lower GI bleeding on clinical grounds. • Perform initial resuscitation and risk stratification of a bleeding patient. • Outline endoscopic, pharmacological and supportive management.				
184	**Blood Product Transfusion Protocols & Reactions**	SGD	PG (ICU)	Could Know
Learning Outcomes: • State the indications and safety protocols for transfusion of blood and its products. • Recognise and classify acute transfusion reactions. • Outline step-by-step management of transfusion reactions.				
185	**Acute Severe Asthma / Acute Respiratory Failure**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Recognise features of acute severe, life-threatening and near-fatal asthma. • Differentiate type I from type II respiratory failure. • Outline emergency management including oxygen, bronchodilators, steroids and ventilatory support.				

186	**GINA Guidelines**	SGD	PG (ICU)	Should Know

Learning Outcomes:

- Describe asthma control assessment and the stepwise approach of GINA guidelines.
- Select controller and reliever therapy appropriate to each step.
- Explain the role of inhaler technique and patient education.

187	**Oxygen Delivery Devices**	SGD	PG (ICU)	Should Know

Learning Outcomes:

- Enumerate low-flow and high-flow oxygen delivery devices.
- Select the appropriate device and flow rate for a given clinical situation.
- Monitor response and recognise oxygen toxicity and CO2 retention.

188	**Management of the Unconscious Patient**	SGD	PG (ICU)	Should Know

Learning Outcomes:

- Perform a rapid ABCDE assessment of an unconscious patient and apply the Glasgow Coma Scale.
- Enumerate common causes of coma and the key bedside investigations.
- Outline initial emergency management and indications for escalation.

189	**Management of Acute Stroke**	SGD	PG (ICU)	Must Know

Learning Outcomes:

- Differentiate ischemic from hemorrhagic stroke clinically and by imaging.
- Describe time-critical management including thrombolysis eligibility.
- Outline supportive care and secondary prevention.

190	**Status Epilepticus**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Define status epilepticus and list its common causes. • Outline the stepwise emergency management (benzodiazepines, second-line antiepileptics). • Identify and manage complications and refractory status.				
191	**Hypovolemic & Septic Shock**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Classify shock and identify its clinical features and hemodynamic profile. • Describe fluid resuscitation and vasopressor use. • Outline measures to identify and treat the underlying cause.				
192	**Surviving Sepsis Campaign Guidelines (SSCG) 2021**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Define sepsis and septic shock as per Sepsis-3 criteria. • Apply the one-hour bundle: lactate, cultures, antibiotics, fluids and vasopressors. • Describe targets of resuscitation and monitoring.				
193	**Diabetic Ketoacidosis (DKA)**	SGD	PG (ICU)	Must Know
Learning Outcomes: • Diagnose DKA on clinical and biochemical criteria. • Outline fluid, insulin and potassium management with monitoring. • Identify precipitating factors and complications.				

194	**Interpretation of Common Lab Investigations**	SGD	PG (ICU)	Should Know

Learning Outcomes:

- Interpret common biochemical and hematological investigations in a clinical context.
- Recognise critical values that need urgent action.
- Correlate laboratory findings with diagnosis and treatment decisions.

195	**Interpretation of Common Imaging Studies**	SGD	PG (ICU)	Should Know

Learning Outcomes:

- Identify common abnormalities on chest and abdominal X-rays, and describe the role of ultrasound and CT.
- Select the appropriate imaging modality for a given clinical question.
- Correlate imaging findings with the clinical picture.

Infection Control				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
196	**Introduction / Hand Hygiene**	Demonstration	PG (ICU)	Must Know

Learning Outcomes:

- Explain the importance of infection control and healthcare-associated infections.
- Demonstrate the WHO five moments and steps of hand hygiene.
- Choose between hand washing and alcohol rub appropriately.

197	**PPE Donning & Doffing**	Demonstration	PG (ICU)	Must Know
Learning Outcomes: • List the components of personal protective equipment and their indications. • Demonstrate the correct sequence of donning and doffing. • Avoid self-contamination during removal.				
198	**Isolation Precautions** *Week 1, Day 3, 05:20 – 06:10*	Demonstration	PG (ICU)	Should Know
Learning Outcomes: • Differentiate standard from transmission-based (contact, droplet, airborne) precautions. • Identify conditions requiring each type of isolation. • Apply isolation measures in the ward setting.				
199	**Waste Disposal**	Demonstration	PG (ICU)	Should Know
Learning Outcomes: • Classify hospital waste and the colour-coding system. • Demonstrate safe segregation and disposal of infectious and sharp waste. • Describe the hazards of improper waste handling.				
200	**Needle Stick Injuries**	Demonstration	PG (ICU)	Must Know
Learning Outcomes: • Describe the risk of transmission of HBV, HCV and HIV after needle stick injury. • Outline immediate first aid and reporting steps. • Describe post-exposure prophylaxis and follow-up, and measures for prevention.				

Procedures				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
201	**NG Tube / Foley Catheterization / CVP Line**	Skill Lab / Clinical Teaching	PG (ICU)	Should Know
Learning Outcomes: • State indications, contraindications and complications of NG tube, urinary catheter and CVP line. • Demonstrate the procedures on a manikin with aseptic technique and consent. • Confirm correct placement and provide appropriate aftercare.				
202	**Oxygen Delivery Devices / BLS**	Skill Lab / Clinical Teaching	PG (ICU)	Must Know
Learning Outcomes: • Demonstrate the use of common oxygen delivery devices. • Perform basic life support (compressions, airway and breathing) according to current guidelines. • Use an AED correctly.				
203	**Procedures in the Ward**	Skill Lab / Clinical Teaching	PG Trainee	Should Know
Learning Outcomes: • Observe and assist in routine ward procedures (venipuncture, cannulation, injections, sampling, aspiration). • Follow aseptic technique and obtain informed consent. • Document procedures and dispose of sharps safely.				

204	**Endotracheal Intubation (with Video)**	Skill Lab / Clinical Teaching	PG (ICU)	Should Know
Learning Outcomes: • State the indications for endotracheal intubation. • Describe the equipment, steps and confirmation of tube placement. • Recognise complications of intubation.				
205	**CVP Line Insertion (with Video)**	Skill Lab / Clinical Teaching	PG (ICU)	Should Know
Learning Outcomes: • State indications, sites and complications of central venous catheterisation. • Describe the steps of insertion using aseptic and ultrasound-guided technique. • Outline care and prevention of line-associated infection.				
206	**Airway Management Devices**	Skill Lab / Clinical Teaching	PG (ICU)	Must Know
Learning Outcomes: • Identify basic and advanced airway devices (OPA, NPA, LMA, endotracheal tube). • Select and demonstrate the appropriate device for the situation. • Describe the maneuvers to open the airway.				

Ward Visit				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
207	**Visit to Oncology Ward: chemotherapy**	Ward Visit (Clinical Teaching)	PG Trainee	Could Know
Learning Outcomes: • Observe the administration of chemotherapy and the safety precautions involved. • Recognise common chemotherapy toxicities and their basic management. • Communicate empathetically with cancer patients and families.				
208	**Visit to Dengue Ward**	Ward Visit (Clinical Teaching)	PG Trainee	Should Know
Learning Outcomes: • Identify the clinical phases and warning signs of dengue fever. • Interpret platelet count and hematocrit trends. • Outline fluid management and monitoring in dengue.				

History Taking				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
209	**History Taking of Newly Admitted Patients**	Bedside Teaching	PG Trainee	Must Know
Learning Outcomes: • Take a complete and structured history from a newly admitted patient. • Document the history in the patient record in logical order. • Show empathy and respect the patient's privacy and confidentiality.				

6.4 Unit II – Evening Sessions (CCU Rotation)

Ward Rotation (CCU)				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
210	**Approach to Tachyarrhythmias: ECG Basics**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Describe a systematic approach to reading an ECG (rate, rhythm, axis, intervals, morphology). • Classify tachyarrhythmias into narrow- and wide-complex types. • Identify the hemodynamically unstable patient.				
211	**Precordial Examination: Inspection (Apex Beat)**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Inspect the precordium for scars, deformities and visible pulsations. • Locate the apex beat and describe its character. • Interpret displacement or abnormal character of the apex beat.				
212	**Observation of Procedures: Phlebotomy**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Describe the indications, equipment and steps of venepuncture. • Observe aseptic technique, correct labelling and safe sharps disposal. • Recognise complications of phlebotomy.				

213	**ECG Changes in Tachyarrhythmias**	Clinical Teaching (CCU)	PG on call in CCU	Should Know

Learning Outcomes:

- Identify the ECG features of sinus tachycardia, SVT, atrial flutter, atrial fibrillation and ventricular tachycardia.
- Differentiate SVT with aberrancy from VT.
- Correlate the ECG with the clinical presentation.

214	**Precordial Examination: Auscultation**	Clinical Teaching (CCU)	PG on call in CCU	Should Know

Learning Outcomes:

- Auscultate the four cardiac areas in correct sequence and with the correct technique.
- Identify normal and abnormal heart sounds and murmurs.
- Relate auscultatory findings to the underlying valvular lesion.

215	**Management of Tachyarrhythmias**	Clinical Teaching (CCU)	PG on call in CCU	Should Know

Learning Outcomes:

- Distinguish stable from unstable tachyarrhythmias.
- Outline management including vagal maneuvers, adenosine, antiarrhythmics and synchronized cardioversion.
- Describe indications for urgent specialist referral.

216	**ECG Changes in Bradyarrhythmias**	Clinical Teaching (CCU)	PG on call in CCU	Should Know

Learning Outcomes:

- Identify sinus bradycardia, sick sinus syndrome and AV blocks on ECG.
- Differentiate first-, second- and third-degree AV block.
- Correlate ECG findings with symptoms.

217	**Management of Bradyarrhythmias**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Identify unstable bradycardia (hypotension, syncope, shock). • Outline management with atropine, inotropes and pacing. • Describe indications for temporary and permanent pacemaker.				
218	**Examination of pulse**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Assess pulse rate, rhythm, volume, character and radio-femoral delay. • Identify abnormal pulses (collapsing, pulsus paradoxus, irregularly irregular). • Interpret abnormal pulse findings clinically.				
219	**ECG Changes in Acute Coronary Syndrome (ACS)**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Identify ST elevation, ST depression, T-wave inversion and pathological Q waves. • Localize the infarct territory from ECG leads. • Differentiate STEMI from NSTEMI/unstable angina and common mimics.				
220	**Management of Acute Coronary Syndrome (ACS)**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Outline immediate management (aspirin, P2Y12 inhibitor, anticoagulation, analgesia, oxygen if indicated). • Describe reperfusion strategies: primary PCI and thrombolysis. • Identify early complications and arrange appropriate monitoring.				

221	**Examination of JVP**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Position the patient and demonstrate correct technique for JVP measurement. • Differentiate JVP waveforms and identify abnormal patterns. • Interpret raised JVP in cardiac and non-cardiac conditions.				
222	**Miscellaneous ECGs**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Recognise ECG changes of hyperkalemia, hypokalemia, pericarditis, pulmonary embolism and ventricular hypertrophy. • Identify bundle branch blocks and pre-excitation. • Relate ECG patterns to the clinical scenario.				
223	**Management of Hyperkalemia**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Recognise the clinical and ECG features of hyperkalemia. • Outline emergency management: calcium gluconate, insulin-dextrose, salbutamol and removal strategies. • Identify the underlying cause and arrange monitoring.				
224	**Examination of Back of Chest**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Perform a systematic examination of the back of the chest with consent, privacy and appropriate patient positioning. • Identify and interpret the key clinical signs: expansion, percussion note, breath sounds, crepitations and vocal resonance. • Present the findings logically and formulate a provisional diagnosis with relevant differentials.				

225	**Observation of Patient Safety**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Describe the principles of patient safety and the common types of medical error. • Observe patient identification, safe handover and incident reporting in CCU. • Apply the principles of safe care in daily practice.				
226	**Drug / Medicine Safety**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Apply the 'rights' of safe medication administration. • Identify high-alert drugs and look-alike/sound-alike risks. • Describe how to report adverse drug events.				
227	**Streptokinase (SK) Administration Protocols & Communication Skills**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • State the indications, contraindications and administration protocol of streptokinase. • Monitor for reperfusion, bleeding and allergic reactions. • Counsel the patient and family about the risks and benefits of thrombolysis.				
228	**Informed consent in CCU**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Describe the elements of valid informed consent. • Obtain consent for investigations and procedures in an emergency/critical-care setting. • Respect autonomy, confidentiality and surrogate decision-making.				

229	**History Taking of a Patient with Chest Pain**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Take a structured history of chest pain (SOCRATES, associated symptoms, risk factors). • Differentiate cardiac from non-cardiac chest pain. • Identify red-flag features requiring urgent evaluation.				
230	**Atrial Fibrillation & Its Management**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Classify atrial fibrillation and identify its causes. • Outline rate versus rhythm control and the role of cardioversion. • Apply stroke-risk assessment (CHA2DS2-VASc) and decide on anticoagulation.				
231	**Anticoagulants & Their Types**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Classify anticoagulants (heparins, warfarin, DOACs). • State the indications, monitoring and reversal of each. • Recognise adverse effects and important interactions.				
232	**History Taking of a Patient with Shortness of Breath**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Take a structured history of dyspnea (onset, duration, exertional limits, orthopnea, PND). • Differentiate cardiac from respiratory causes. • Identify red-flag features needing urgent action.				

233	**Pulmonary Embolism: Approach & Management**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Identify risk factors and clinical features of pulmonary embolism. • Apply pre-test probability scoring (Wells) and select investigations (D-dimer, CTPA). • Outline anticoagulation, thrombolysis and supportive treatment.				
234	**Infection Control Policies in CCU**	Clinical Teaching (CCU)	PG on call in CCU	Must Know
Learning Outcomes: • Describe hand hygiene, isolation and aseptic practices in CCU. • Outline prevention of central-line and catheter-associated infections. • Apply hospital infection control policy in daily practice.				
235	**Approach to a Patient with Pulmonary Edema & Its Management**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Recognise clinical and radiological features of acute pulmonary edema. • Outline emergency management (sitting position, oxygen, diuretics, nitrates, NIV). • Identify and treat the precipitating cause.				
236	**Pulmonary Edema: Types & Causes**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Differentiate cardiogenic from non-cardiogenic pulmonary edema. • Enumerate the common causes of each type. • Describe the underlying pathophysiology.				

237	**Pericardial Effusion: Types & Causes**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Classify pericardial effusion by fluid type and duration. • Enumerate its causes including infective, malignant and uremic. • Recognise features of cardiac tamponade.				
238	**Management of Pericardial Effusion**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Describe investigations for pericardial effusion (echo, ECG, X-ray, fluid analysis). • State the indications and technique of pericardiocentesis. • Interpret pericardial fluid findings and treat the underlying cause.				
239	**ECG & X-ray Changes**	Clinical Teaching (CCU)	PG on call in CCU	Should Know
Learning Outcomes: • Identify characteristic ECG changes (low voltage, electrical alternans) and X-ray changes (globular heart, pulmonary congestion). • Correlate radiological and ECG findings with the clinical diagnosis. • Select further investigations on this basis.				

6.5 Allied Medicine Topics

Cardiology, Dermatology, Emergency Medicine and Psychiatry

Cardiology – Long Case				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
240	**Hypertension (HTN)**	Long Case	Dr. Bakhat Umer	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Define and classify hypertension and identify its common secondary causes. • Plan appropriate investigations and assess target-organ damage. • Discuss lifestyle and pharmacological management. • Identify hypertensive emergency, urgency and pregnancy-induced hypertension and outline their specific management.				
241	**ST-Elevation MI (STEMI)**	Long Case	Dr. Bakhat Umer	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Diagnose STEMI from history, ECG changes and cardiac biomarkers. • Outline reperfusion (primary PCI/thrombolysis) and adjunctive drug therapy. • Identify complications of STEMI and plan secondary prevention.				
242	**Heart Failure (HF)**	Long Case	Dr. Bakhat Umer	Must Know
Learning Outcomes: • Take a complete history, examine the patient and present the case in a logical order. • Define and classify heart failure (HFrEF/HFpEF; acute/chronic) and identify its causes. • Diagnose heart failure and select investigations including echocardiography and BNP. • Discuss management of chronic and acute heart failure.				

243	**Atrial Fibrillation (AF)**	Long Case	Dr. Bakhat Umer	Must Know

Learning Outcomes:

- Take a complete history, examine the patient and present the case in a logical order.
- Identify types and causes of atrial fibrillation.
- Interpret the ECG and assess hemodynamic stability.
- Outline rate/rhythm control and stroke prevention.

Cardiology – CBL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
244	**Hypertension (HTN)**	CBL	Dr. Bakhat Umer	Must Know

Learning Outcomes:

- Define and classify hypertension and identify its common secondary causes.
- Plan appropriate investigations and assess target-organ damage.
- Discuss lifestyle and pharmacological management.
- Identify hypertensive emergency, urgency and pregnancy-induced hypertension and outline their specific management.

245	**Myocardial Infarction (MI)**	CBL	Dr. Bakhat Umer	Must Know

Learning Outcomes:

- Differentiate acute from chronic coronary syndromes and their specific investigations.
- Assess STEMI/NSTEMI and its management; diagnose its complications.
- Enlist appropriate investigations including baseline tests, troponin, chest X-ray, echocardiography and cardiac catheterization.

246	**Heart Failure (HF)**	CBL	Dr. Bakhat Umer	Must Know
Learning Outcomes: • Define and classify heart failure (HFrEF/HFpEF; acute/chronic) and identify its causes. • Diagnose heart failure and select investigations including echocardiography and BNP. • Discuss management of chronic and acute heart failure.				
247	**Atrial Fibrillation (AF)**	CBL	Dr. Bakhat Umer	Must Know
Learning Outcomes: • Identify types and causes of atrial fibrillation. • Interpret the ECG and assess hemodynamic stability. • Outline rate/rhythm control and stroke prevention.				

Cardiology – SDL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
248	**Complications of STEMI**	SDL	Dr. Abdul Rasheed	Must Know
Learning Outcomes: • Enumerate early and late complications (arrhythmias, heart failure, mechanical complications, pericarditis, Dressler syndrome). • Recognise the clinical presentation of each complication. • Outline their management.				
249	**Heart Failure (HF)**	SDL	Dr. Abdul Rasheed	Must Know
Learning Outcomes: • Define and classify heart failure (HFrEF/HFpEF; acute/chronic) and identify its causes. • Diagnose heart failure and select investigations including echocardiography and BNP. • Discuss management of chronic and acute heart failure.				

250	**Atrial Fibrillation (AF)**	SDL	Dr. Abdul Rasheed	Must Know

Learning Outcomes:

- Identify types and causes of atrial fibrillation.
- Interpret the ECG and assess hemodynamic stability.
- Outline rate/rhythm control and stroke prevention.

Cardiology – History Taking				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
251	**History Taking in Cardiology Ward / CCU**	Bedside Teaching	Dr. Abdul Rasheed	Must Know

Learning Outcomes:

- Take a focused cardiac history (chest pain, dyspnea, palpitations, syncope, risk factors).
- Document and present the history logically.
- Communicate empathetically in a critical-care setting.

Cardiology – Skills				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
252	**Echo / ETT Station**	Skill Lab	Dr. Abdul Rasheed	Could Know

Learning Outcomes:

- Describe the principles, indications and contraindications of echocardiography and exercise tolerance testing.
- Identify basic echocardiographic findings (LV function, valve lesions, effusion).
- Interpret a positive ETT and its significance.

Dermatology – SGD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
253	**Fungal Infections**	SGD	Dr. Naveed Akhtar	Should Know
Learning Outcomes: • Classify superficial fungal infections of skin (tinea, candidiasis, pityriasis versicolor). • Diagnose them clinically and with KOH mount/culture. • Outline topical and systemic antifungal treatment.				
254	**Viral Infection**	SGD	Dr. Naveed Akhtar	Should Know
Learning Outcomes: • Enlist common viral infections of the skin (herpes simplex, zoster, warts, molluscum, measles). • Establish the diagnosis on clinical features and investigations. • Elaborate management modalities.				
255	**Skin Infestations**	SGD	Dr. Naveed Akhtar	Should Know
Learning Outcomes: • Diagnose scabies and pediculosis on clinical features and investigations. • Recommend specific treatment options for each. • Counsel on contact tracing and prevention of recurrence.				
256	**Bacterial Infections**	SGD	Dr. Naveed Akhtar	Should Know
Learning Outcomes: • Enlist the types of bacterial and mycobacterial skin infections (impetigo, folliculitis, cellulitis, leprosy, cutaneous TB). • Identify their clinical features and complications. • Develop a plan to confirm the diagnosis and treat.				

Dermatology – Tutorial				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
257	**Psoriasis**	Tutorial	Dr. Maham Amin	Should Know
Learning Outcomes: • Describe the clinical types and triggers of psoriasis. • Identify characteristic signs (Auspitz sign, Koebner phenomenon, nail changes). • Outline topical, phototherapy and systemic therapy options.				
258	**Lichen Planus**	Tutorial	Dr. Maham Amin	Could Know
Learning Outcomes: • Describe the clinical features (the 6 Ps) and sites of involvement including oral mucosa. • Establish the diagnosis clinically and by biopsy. • Outline management.				
259	**Eczema**	Tutorial	Dr. Maham Amin	Should Know
Learning Outcomes: • Classify the types of eczema (atopic, contact, seborrheic, discoid). • Identify clinical features and precipitating factors. • Outline the principles of emollient, topical steroid and systemic therapy.				
260	**Bullous Disorders**	Tutorial	Dr. Maham Amin	Could Know
Learning Outcomes: • Differentiate pemphigus from bullous pemphigoid clinically and histologically. • Describe the investigations (biopsy, direct immunofluorescence, Nikolsky sign). • Outline management and complications.				

Dermatology – CBL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
261	**Erythroderma**	CBL	Dr. Amir Saleem	Should Know
Learning Outcomes: • Define erythroderma and list its common causes. • Identify its complications and assess the patient. • Outline emergency management and treatment of the underlying cause.				
262	**Cellulitis**	CBL	Dr. Amir Saleem	Should Know
Learning Outcomes: • Identify the clinical features and risk factors of cellulitis. • Differentiate it from necrotizing fasciitis and other mimics. • Outline antibiotic therapy and complications.				

Dermatology – History Taking				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
263	**History Taking & Examination (Dermatology)**	Bedside Teaching	Dr. Naveed Akhtar	Must Know
Learning Outcomes: • Take a focused dermatological history. • Describe skin lesions using correct morphological terms (primary and secondary lesions, distribution). • Formulate a differential diagnosis and plan investigations.				

Dermatology – Procedures				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
264	**Dermatological Surgical Procedures**	Skill Lab / Clinical Teaching	Dr. Naveed Akhtar	Could Know
Learning Outcomes: • Describe common minor dermatological procedures (biopsy, cryotherapy, electrocautery, excision). • State their indications and precautions. • Observe aseptic technique and counsel the patient with consent.				

Emergency Medicine – SGD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
265	**Patient triage in ED**	SGD	Dr. Huma Hussain	Must Know
Learning Outcomes: • Describe the concept of triage in the Emergency Department and commonly used triage tools. • Describe the Emergency Severity Index (ESI) and its levels of priority. • Correctly apply ESI triage to paper-based scenarios.				
266	**Using HMIS for Electronic Medical Record (EMR)**	SGD	To be announced	Could Know
Learning Outcomes: • Navigate the Hospital Management Information System to register and track patients. • Enter and retrieve clinical data accurately. • Maintain confidentiality and data security.				

267	**Approach to patient with chest pain**	SGD	Dr. Huma Hussain	Must Know
Learning Outcomes: • Describe the concept of undifferentiated patients in the emergency setting. • Formulate a diagnostic work-up for chest pain that rules out life-threatening conditions (ACS, PE, aortic dissection, tension pneumothorax). • Identify low-risk patients using history, examination, ECG and risk-stratification tools.				
268	**Hemorrhagic shock**	SGD	Dr. Huma Hussain	Must Know
Learning Outcomes: • Classify hemorrhage (ATLS classes I–IV) and recognise its clinical features. • Outline resuscitation: access, fluids, blood products, hemorrhage control. • Identify the source of bleeding and decide on definitive care.				

Emergency Medicine – Skills				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
269	**BLS: Chest Compressions**	Skill Lab	Dr. Huma Hussain	Must Know
Learning Outcomes: • Recognise cardiac arrest and activate the emergency response. • Demonstrate high-quality chest compressions (rate, depth, recoil) on a manikin. • Minimise interruptions and work as a team.				
270	**BLS: Bag-Valve-Mask Ventilation**	Skill Lab	Dr. Huma Hussain	Must Know
Learning Outcomes: • Open the airway with head-tilt/chin-lift and jaw thrust. • Demonstrate effective bag-valve-mask ventilation. • Coordinate compressions and ventilations (30:2).				

271	**BLS: AED / Defibrillator Use**	Skill Lab	Dr. Huma Hussain	Must Know
Learning Outcomes: • Identify shockable and non-shockable rhythms. • Demonstrate correct AED pad placement and safe shock delivery. • Resume CPR immediately after the shock.				

Emergency Medicine – Bedside Teaching				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
272	**Airway Adjuncts & Management**	Bedside Teaching	Dr. Huma Hussain	Must Know
Learning Outcomes: • Identify indications for airway adjuncts (OPA, NPA, supraglottic devices). • Demonstrate correct sizing and insertion. • Recognise a difficult airway and call for help.				
273	**Oxygen therapy**	Bedside Teaching	Dr. Huma Hussain	Should Know
Learning Outcomes: • State the indications for oxygen therapy and target saturations. • Select the appropriate delivery device and flow. • Monitor response and avoid complications (CO2 retention).				
274	**Approach to a Patient with Acute Poisoning**	Bedside Teaching	To be announced	Must Know
Learning Outcomes: • Perform initial stabilization (ABCDE) of a poisoned patient. • Obtain a focused history and identify toxidromes. • Outline decontamination, antidotes and supportive treatment.				

275	**Snake Envenomation**	Bedside Teaching	Dr. Huma Hussain	Must Know
Learning Outcomes: • Classify snake bite based on snake type and nature of envenomation (neurotoxic, hemotoxic). • Outline immediate management and long-term care. • Discuss antivenom indications, dosing and complications.				
276	**Focused History Taking in ED**	Bedside Teaching	To be announced	Must Know
Learning Outcomes: • Obtain a focused, time-efficient history in an emergency (AMPLE). • Prioritise life-threatening conditions. • Communicate effectively with patients and attendants under pressure.				
277	**Organophosphate Poisoning**	Bedside Teaching	Dr. Huma Hussain	Must Know
Learning Outcomes: • Describe the mechanism of toxicity and the muscarinic, nicotinic and CNS features. • Outline decontamination and the use of atropine and pralidoxime. • Recognise complications such as intermediate syndrome.				
278	**Hypothermia & Hyperthermia**	Bedside Teaching	Dr. Huma Hussain	Should Know
Learning Outcomes: • Classify and recognise the clinical features of hypothermia and heat-related illness. • Outline rewarming and cooling strategies. • Identify complications and underlying causes.				

279	**CVS Examination (Emergency Setting)**	Bedside Teaching	Dr. Huma Hussain	Should Know
Learning Outcomes: • Perform a rapid focused cardiovascular examination in an emergency. • Identify signs of shock, heart failure and tamponade. • Decide on immediate investigations and management.				
280	**Acute Diabetic Emergencies**	Bedside Teaching	To be announced	Should Know
Learning Outcomes: • Differentiate DKA, HHS and hypoglycemia clinically and biochemically. • Outline emergency management of each. • Identify precipitants and plan follow-up.				
281	**12 Lead ECG technique**	Bedside Teaching	To be announced	Should Know
Learning Outcomes: • Demonstrate correct lead placement and recording of a 12-lead ECG. • Recognise common technical errors and artefacts. • Identify life-threatening abnormalities requiring immediate action.				
282	**Abdominal Pain in Adults**	Bedside Teaching	To be announced	Should Know
Learning Outcomes: • Take a focused history of acute abdominal pain by location and character. • Identify surgical emergencies (perforation, obstruction, ischemia, ruptured AAA). • Select initial investigations and decide on referral.				

283	**Headache (Emergency Approach)**	Bedside Teaching	To be announced	Should Know
Learning Outcomes: • Differentiate primary from secondary headache. • Recognise red-flag features (thunderclap, fever with neck stiffness, neurological deficit). • Outline investigations and initial management.				
284	**CNS Emergencies: Meningitis & Encephalitis**	Bedside Teaching	To be announced	Must Know
Learning Outcomes: • Recognise clinical features of meningitis and encephalitis. • Outline the immediate approach: cultures, empirical antibiotics/antivirals, LP and imaging. • Identify complications and measures for contacts.				
285	**Status Epilepticus**	Bedside Teaching	To be announced	Must Know
Learning Outcomes: • Define status epilepticus and list its common causes. • Outline the stepwise emergency management (benzodiazepines, second-line antiepileptics). • Identify and manage complications and refractory status.				

Emergency Medicine – Other Topics				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
286	**Undifferentiated Dyspnea / Acute Asthma**	SGD	To be announced	Must Know
Learning Outcomes: • Perform a diagnostic work-up of a patient with moderate to severe shortness of breath. • Categorise patients by severity and propose bedside investigations. • Manage a patient with acute asthma in a stepwise manner.				
287	**Pulmonary Embolism: Assessment & Diagnosis**	SGD	To be announced	Must Know
Learning Outcomes: • Recognise the risk factors and clinical features of PE. • Apply Wells/PERC criteria and interpret D-dimer and CTPA. • Outline initial emergency management.				
288	**Primary & Secondary Survey**	SGD	To be announced	Must Know
Learning Outcomes: • Perform a primary survey (ABCDE) of a trauma/critically ill patient. • Perform a systematic secondary survey (head-to-toe). • Prioritise and document findings and interventions.				
289	**Aseptic dressing**	SGD	Dr. Tazeen Hina Kazmi	Should Know
Learning Outcomes: • Describe the principles of asepsis and wound care. • Demonstrate aseptic dressing technique. • Recognise wound infection and dispose of waste safely.				

290	**Syncope**	SGD	Dr. Huma Hussain	Must Know
Learning Outcomes: • Differentiate syncope from seizure and other causes of transient loss of consciousness. • Identify high-risk features (cardiac syncope) in history, ECG and examination. • Plan investigations and disposition.				
291	**Sepsis & MEWS**	SGD	Dr. Huma Hussain	Must Know
Learning Outcomes: • Define sepsis and septic shock and apply qSOFA/MEWS. • Initiate early management using the sepsis bundle. • Recognise the deteriorating patient and escalate care.				
292	**Abdominal Examination (Emergency Setting)**	SGD	To be announced	Should Know
Learning Outcomes: • Perform a focused abdominal examination (inspection, palpation, percussion, auscultation) in an emergency. • Elicit signs of peritonitis and obstruction. • Formulate differential diagnosis and plan investigations.				

Psychiatry – SGD				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
293	**Management of Depression**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • Manage depression using a bio-psychosocial model. • Identify the role of psychoeducation in management. • Recognise when to initiate, monitor and terminate antidepressant treatment. • Classify antidepressants and explain their dosing and common and serious side effects.				

294	**Management of Mood Affective Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Manage bipolar affective disorder on the basis of a bio-psychosocial model. • Describe how to treat acute mania and bipolar depression. • Explain maintenance treatment and its monitoring.				
295	**Management of Schizophrenia**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Outline the acute and long-term management of schizophrenia. • Classify antipsychotics and describe their adverse effects and monitoring. • Identify the importance of adherence, rehabilitation and family support.				
296	**Management of Conversion Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Describe how to treat conversion disorder. • Explain the principles of reassurance, graded rehabilitation and psychotherapy. • Avoid unnecessary investigations while excluding organic disease.				

Psychiatry – Tutorial				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
297	**Mood Affective Disorder**	Tutorial	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Define bipolar disorder in view of ICD-10 criteria. • Describe etiology, psychopathology, epidemiology, differential diagnosis and prognosis. • Identify the importance of social-network reactivation, rehabilitation and regular follow-up.				
298	**Schizophrenia**	Tutorial	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Define schizophrenia in view of ICD-10 criteria. • Describe positive, negative and cognitive symptoms and subtypes. • Describe etiology, differential diagnosis and prognosis.				
299	**Conversion disorder**	Tutorial	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Define conversion (dissociative) disorder. • Describe its clinical presentation and differentiate it from organic and factitious conditions. • Describe how to treat conversion disorder.				

Psychiatry – SDL				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
300	**Obsessive Compulsive Disorder (OCD)**	SDL	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know

Learning Outcomes:

- Define GAD, panic disorder, phobias and OCD in view of ICD-10 criteria for anxiety disorders.
- Describe etiology, psychopathology, epidemiology, differential diagnosis and prognosis.
- Manage anxiety disorders on a bio-psychosocial basis, including psychoeducation, counseling and non-pharmacological interventions.

Psychiatry – Case Discussion & Counseling				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
301	**Non-pharmacological Management of Depression**	Case Discussion & Counseling	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know

Learning Outcomes:

- Describe psychotherapies for depression (CBT, interpersonal therapy, behavioral activation).
- Counsel a patient with depression and assess suicide risk.
- Explain lifestyle measures and social support.

302	**Non-pharmacological Management of Mood Affective Disorder**	Case Discussion & Counseling	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Describe psychoeducation, mood monitoring and sleep regulation in bipolar disorder. • Explain the role of family therapy and relapse-prevention planning. • Counsel the patient on adherence and early warning signs.				
303	**Non-pharmacological Management of Schizophrenia**	Case Discussion & Counseling	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Describe psychosocial interventions in schizophrenia (family psychoeducation, CBT for psychosis, social skills training). • Explain the importance of rehabilitation and community support. • Counsel the family on caregiving and relapse prevention.				
304	**Non-pharmacological Management of Conversion Disorder**	Case Discussion & Counseling	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • Describe supportive psychotherapy, suggestion and behavioral approaches for conversion disorder. • Explain reassurance and stress management. • Counsel the patient and family regarding the nature of the disorder.				

Psychiatry – Topic Discussion				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
305	**Detailed History Taking in Depression**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • Take a detailed psychiatric history from a depressed patient, including risk assessment. • Perform a mental state examination. • Present the case in a structured way.				
306	**Diagnostic Criteria of Depression**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • State the ICD-10 criteria for a depressive episode and grade its severity. • Differentiate depression from grief, adjustment disorder and organic causes. • Identify features of melancholic and psychotic depression.				
307	**Detailed History Taking in Mood Affective Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • Take a detailed history of manic and depressive episodes. • Elicit family history and precipitating factors. • Assess risk and insight.				

308	**Diagnostic Criteria of Mood Affective Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • State the ICD-10 criteria for mania, hypomania and bipolar affective disorder. • Differentiate bipolar disorder from unipolar depression and schizophrenia. • Identify rapid-cycling and mixed states.				
309	**Detailed History Taking in Schizophrenia**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • Take a detailed history including onset, prodrome and psychotic symptoms from patient and informant. • Perform a mental state examination of a psychotic patient. • Assess insight and risk.				
310	**Diagnostic Criteria of Schizophrenia**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know
Learning Outcomes: • State the ICD-10 criteria for schizophrenia (first-rank symptoms). • Differentiate it from schizoaffective, delusional and substance-induced psychosis. • Describe the duration requirement and course specifiers.				
311	**Detailed History Taking in Conversion Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Must Know
Learning Outcomes: • Take a detailed history including stressors and secondary gain. • Document symptoms and exclude organic causes. • Communicate sensitively without dismissing the symptoms.				

312	**Diagnostic Criteria of Conversion Disorder**	SGD	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Should Know

Learning Outcomes:

- State the ICD-10 criteria for dissociative (conversion) disorders.
- Differentiate them from neurological disease, malingering and factitious disorder.
- Identify common motor and sensory presentations.

Psychiatry – Psychometric Test Discussion				
S. No.	**Topic / Theme**	**Educational Strategy**	**Name of Instructor**	**Importance**
313	**BDI Scale**	Tutorial / Demonstration	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Could Know

Learning Outcomes:

- Describe the Beck Depression Inventory and its scoring.
- Interpret scores to grade depression severity.
- State its uses and limitations.

314	**HTP (House-Tree-Person) Test**	Tutorial / Demonstration	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Could Know

Learning Outcomes:

- Describe the purpose and administration of the HTP projective test.
- Outline how responses are interpreted in clinical psychology.
- State the limitations of projective tests.

315	**PANSS Scale**	Tutorial / Demonstration	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Could Know
Learning Outcomes: • Describe the Positive and Negative Syndrome Scale. • Interpret PANSS scores to assess symptom severity. • Use it to monitor treatment response.				
316	**Personality Assessment Test**	Tutorial / Demonstration	Dr. Faheem Qasim / Dr. Fatima Amir / Dr. Shah Muhammad	Could Know
Learning Outcomes: • Describe common personality assessment tools (e.g., MMPI, objective inventories). • Explain indications for personality assessment. • Interpret results in clinical context and recognise limitations.				

7. Learning Resources & Teaching Faculty

Learning Resources

- Davidson's Principles and Practice of Medicine, 23rd Edition

Teaching Faculty

S. No.	Name	Designation	Department
1	Dr. Abdul Rasheed	Associate Professor	Cardiology
2	Dr. Abidain Haider	Assistant Professor	Pulmonology
3	Dr. Ali Riaz	Assistant Professor	Nephrology
4	Dr. Amir Saleem	Senior Registrar	Dermatology
5	Prof. Dr. Asim Ali Shah	Professor	Medicine
6	Dr. Ayesha Rani	Assistant Professor	Medicine
7	Dr. Bakhat Umer	Assistant Professor	Cardiology
8	Dr. Faheem Qasim	Professor	Psychiatry
9	Dr. Farhan Nazir	Medical Officer	Nephrology
10	Dr. Farhan Ul Haq	Assistant Professor	Medicine
11	Dr. Fatima Amir	Assistant Professor	Psychiatry
12	Dr. Huma Hussain	Associate Professor	Emergency Medicine
13	Dr. Javeria	Senior Registrar	Oncology
14	Dr. Junaid Ur Rehman	Assistant Professor	Neurology
15	Dr. Kanwal Shahid	Senior Registrar	Medicine
16	Dr. Khalid Bilal Khan	Senior Registrar	Gastroenterology

S. No.	Name	Designation	Department
17	Dr. Khalil Ur Rehman	Assistant Professor	Nephrology
18	Dr. Maham Amin	Senior Registrar	Dermatology
19	Dr. Marzia Sheharbano	Senior Registrar	Medicine
20	Dr. Mubeena Khan	Senior Registrar	Nephrology
21	Prof. Dr. Muzamil Jamil	Professor	Medicine
22	Dr. Naveed Akhtar	Professor	Dermatology
23	Dr. Noreen Adil	Assistant Professor	Gastroenterology
24	Dr. Rifat Yasmin	Associate Professor	Medicine
25	Dr. Rubaba Khan	Senior Registrar	Medicine
26	Dr. Saadia Fatima	Assistant Professor	Medicine
27	Dr. Shah Muhammad	Senior Registrar	Psychiatry
28	Dr. Sidla Rehman	Senior Registrar	Pulmonology
29	Dr. Sohaib Ahmed	Assistant Professor	Medicine
30	Dr. Tazeen Hina Kazmi	Assistant Professor	Emergency Medicine
31	Dr. Umer Farooq	Senior Registrar	Medicine
32	Dr. Wajahat Sultan Baig	Assistant Professor	Medicine

8. Rules & Regulations:

i. Student's code of conduct

The Student Code of Conduct sets out the standards of conduct expected of students. It holds individuals and groups responsible for the consequences of their actions. Failure to fulfill these responsibilities may result in the withdrawal of privileges or the imposition of sanctions.

Wah Medical College is a community of students, faculty and staff involved in learning, teaching, research, and other activities. All members of the WMC community are expected to conduct themselves in a manner that contributes positively to an environment in which respect, civility, diversity, opportunity, and inclusiveness are valued, so as to assure the success of both the individual and the community. The Student Code of Conduct reflects a concern for these values and tries to ensure that members of the WMC can make use of and enjoy the activities, facilities, and benefits of WMC without undue interference from others. during the clerkship, the Students must:

- Follow discipline, dress decently, show good manners, and indulge in healthy activities.
- Avoid smoking and refrain from abusive language.
- Be cooperative and respectful towards their seniors, peers, paramedical staff, patients, and their attendants.

ii. Attendance policy

a. Students are required to mark attendance for every class.

b. The attendance is compiled by the respective department and submitted to Student Affairs by the 10th of each month.

c. The Students Affair Department will compile the absent report, and a fine of Rs. 500/- for a lecture or for the whole day will be imposed on absent students. It is pertinent to mention here that a fine is imposed on students to compel them to attend classes regularly and not to generate the funds.

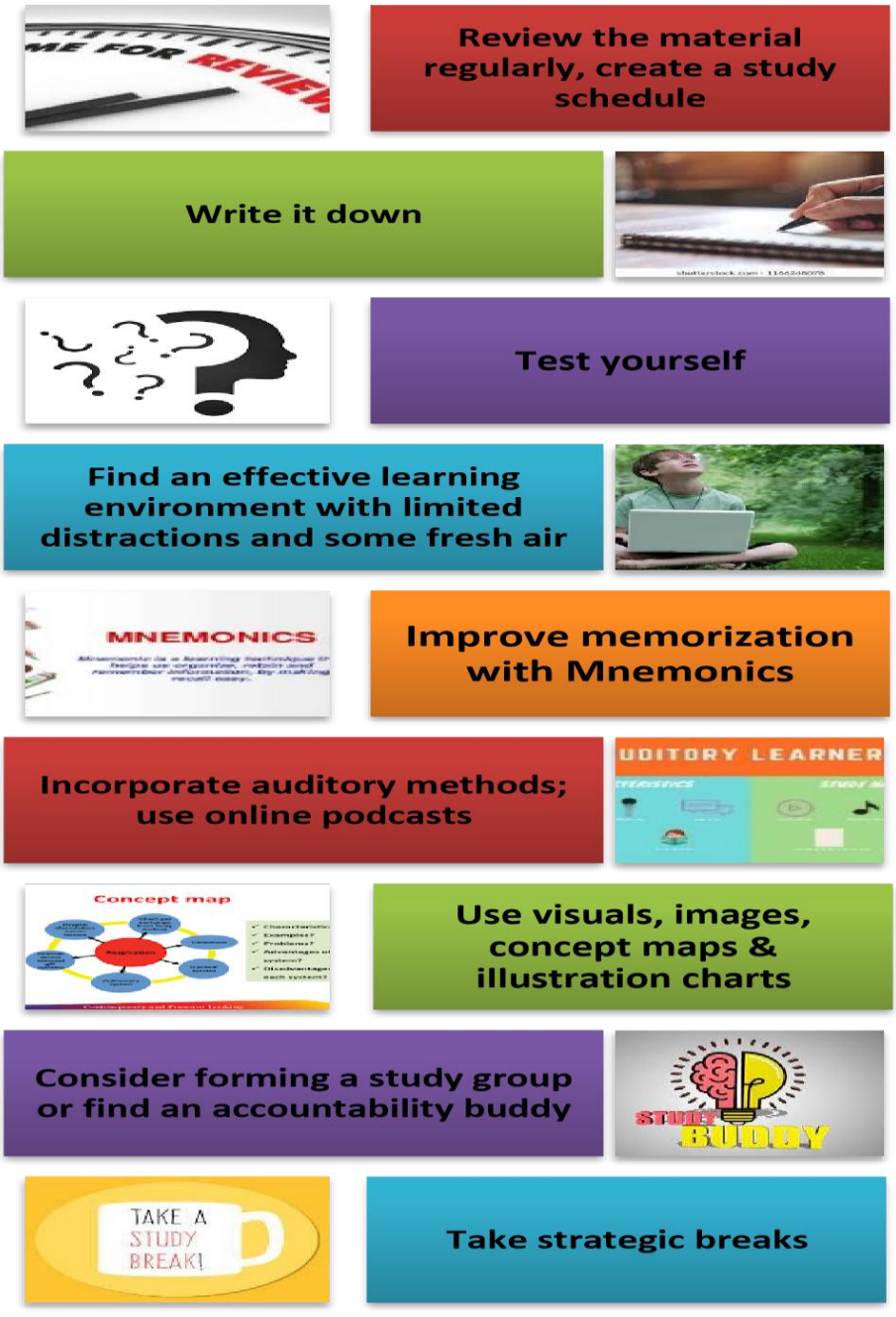
d. In accordance with PM&DC and NUMS regulations, MBBS and BOS students must meet minimum attendance standards to qualify for the Annual Professional Examination. From the 2024-25 session onward, 85% attendance is mandatory. For sessions 2020-23, the 85% requirement will be enforced starting the new academic year. Students in the ongoing 2024-25 session must maintain at least 75% attendance but are strongly encouraged to achieve 85% to meet GMC contact hour requirements.

e. Admission forms of students having attendance less than 75% will NOT be submitted to NUMS for appearing in Annual University Exams.

9. Study tips

Dear Students,

Becoming a doctor is a tough job, but you can make it easier for yourself by adopting some time-tested techniques or habits. It's never too early – or too late – to develop good study habits. The sooner you get into a good self-study pattern, the easier everything will be and the more your chances of getting good marks will improve. Here are our top tips for getting the most out of your self-directed study time. And remember, **Perseverance is the Key to Success!**



10. Feedback on the study guide

We value your feedback and will use it for improvement of this Study guide. Kindly provide feedback for this study guide. At the email:

dme@wahmedicalcollege.edu.pk

dmewahmedicalcollege@gmail.com

11. References:

HARDEN, J.M. LAIDLAW, E.A. HESKETH, R. M. (1999). AMEE Medical Education Guide No 16: Study guides-their use and preparation. *Medical Teacher*, *21*(3), 248–265. https://doi.org/10.1080/01421599979491

Proposed Annual Forecast
Final Year MBBS Session 2022-23 Batch 20th
1st Rotation

Batch A: Surgery & Allied +Gynae/Obs Batch B: Medicine & Allied + Paeds			
28th Sep 2026 to 27th Oct 2026 (24 days Including Working Saturdays)	**28th Oct, 2026 to 26th Nov, 2026**	**27th Nov, 2026 to 29th Dec, 2027** 28th Dec, 2026 to 3rd Jan, 2027 Winter Break	**4th Jan 2027 to 1st Feb, 2027**
A1/B1	A2/B2.	A3/B3	A4/B4
A4/B4	A1/B1	A2/B2	A3/B3
A3/B3	A4/B4	A1/B1	A2/B2
A2/B2	A3/B3	A4/B4	A1/B1
End of Rotation Test from 2nd Feb, 2027 – 8th Feb, 2027)			
Date	**Day**	**Surgery Allied (Batch A)**	**Medicine Allied (Batch B)**
2nd Feb, 2027	Tuesday	Surgery I	Medicine I
3rd Feb, 2027	Wednesday	Obs	On Prep
4th Feb, 2027	Thursday	Gynae	Peads
8th Feb, 2027	Monday	Surgery II	Medicine II