



Student Studyguide 4th Year Block - 1 2024-25

Pathology Department
CMH Multan Institute of
Medical Sciences



MBBS – 4th Year
Block 1
Student Study Guide

CMH Multan Institute of Medical Sciences

Introduction

This study guide is to provide students with an insight into the curricular content and its implementation aligned with the assessment expectations and the details of learning outcomes. The key components of the undergraduate curriculum are taught throughout the five years with increased emphasis on clinical aspects in the last three years. The primary focus is on building knowledge, skills, and attitudes of the students for the practice of medicine and surgery not only at the primary care level but to advance to postgraduate studies for clinical practice, medical education, and research.

Mission

Our mission is to prepare future doctors for independent practice after graduation as a general practitioner who can provide patient-centered medical care with the highest standards of professionalism.

The objectives of the MBBS program

The program objective is to establish a foundation for independent practice after graduation as a general practitioner and involves the principal aspects of health improvement, preventive medicine, and acute and chronic care in the domain of medical disorders.

A. Knowledge

- a) Acquisition of the knowledge and the ability to apply it in an approach to the common complaints and symptoms in medical diseases
- b) Knowledge of common medical diseases and the ability to apply it to the primary medical care of the patients within the limits of a general practitioner's duties
- c) Acquisition of the knowledge of simple procedures in an outpatient setting that the general practitioner must be able to do

B. Skill

- a) Ability to take clinical history and perform clinical examinations in patients with medical disorders
- b) Ability to construct and execute a management plan for common medical diseases including emergencies

- c) Ability to do basic procedures required in the practice of medicine
- d) Ability to interpret results of common laboratory tests and imaging techniques in medicine

C. Competencies

- a) Communication skills
- b) Critical thinking
- c) Problem-solving
- d) Clinical skills
- e) Examination skills
- f) Procedural skills

4th Year Learning Outcomes

By the end of Year 4, the learners should be able to

- Apply knowledge and demonstrate skills of application of the pathological processes of disease
- Correlate the pathophysiology of the body systems with the various treatment models available
- Recognize all health promotion and disease prevention strategies in a national and international context
- Collect, analyze, and, interpret the basic medical research data to produce and publish research papers
- Apply anatomical and physiological knowledge of Eye and ENT to their common and basic pathological conditions and their management.
- Perform basic clinical skills relevant to pre-clinical sciences
- Apply the knowledge and skills of longitudinal themes to the relevant concepts of pre-clinical and clinical sciences

Departmental Vision Statement

Welcome to the Department of Pathology at CMH Institute of Medical Sciences (CIMS) Multan. Our main objective is the provision of resources and opportunities that encourage excellence in learning among students and faculty and to provide impeccable service to the institute.

The mission of pathology department at CMH institute of Medical Sciences is to provide quality education to build concepts regarding various pathologies in the specialties of Microbiology, Histopathology, Hematology, Chemical pathology and Immunology. It not only caters to the pathogenesis of disease and its epidemiology but also focuses on diagnostic methods and their clinical implications. We have an expert team of pathologists/educationists who strive for excellence in teaching/learning while continuously enhancing departmental culture of diversity, respect and professional growth

General pathology and Microbiology cater to providing generalized concepts regarding Pathological basis of disease and Microbiological basis of infection. We focus on providing exemplary educational resources anticipating the educational needs of our students with the help of latest and recommended teaching/learning methodologies in medical education today.

We strive to continue to provide exceptional teaching to our students.

Best Regards
Head of Department
Prof. Dr. Khalid Usman

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DETAILS OF FACULTY

Sr. No.	Name	Designation	Qualification
1.	Prof Dr. Khalid Usman	Professor (Head of Department)	MBBS, M Phil (Histopathology)
2.	Dr Javed Masood	Professor	MBBS, M Phil (Chemical Pathology)
3.	Dr Fareeha Naseer Syed	Professor	MBBS, FCPS, Diplomate FRCPath (Histopathology), ICMT, CHPE
4.	Dr Urwa Sarwar	Associate Professor	MBBS, FCPS (Histopathology), CHPE
5.	Dr Umm e Farwa	Assistant Professor	MBBS, FCPS (Histopathology), ICMT
6.	Dr Rashda Shabbir	Assistant Professor	MBBS, M. Phil (Microbiology)
7.	Dr Qurat ul Ain	Assistant Professor	MBBS, FCPS (Hematology)
8.	Dr Sumaira Malik	Assistant Professor	MBBS, M Phil (Microbiology)
9.	Dr Saadia Latif	Senior Demonstrator	MBBS, FCPS (Hematology)
10.	Dr Anum Akram	Demonstrator	MBBS
11.	Dr Wajih Nazar	Demonstrator	MBBS
12.	Dr Hamza Ali	Demonstrator	MBBS
13.	Dr Zeenat Saleem	Demonstrator	BDS

Curricular Map

Module	Duration of Module	Teaching Methodology	Assessment Methodology
Block I and Foundation Module	Classes = 10 weeks Assessment = 2 weeks	• Lectures • CBL • PBL • SDL • Practical	<u>Tests in Module</u> One in each module – Theory, OSPE <u>Final Module Exam</u> Theory, OSPE, Viva Voce
Block 2	Classes = 10 weeks Assessment = 2 week	• Lectures • CBL • PBL • SDL • Practical	<u>Tests in Module</u> One in each module - Theory, OSPE <u>Final Module Exam</u> Theory, OSPE, Viva Voce
Block 3	Classes = 10 weeks	• Lectures • CBL • PBL • SDL • Practical	<u>Tests in Module</u> One in each module - Theory, OSPE <u>Final Module Exam</u> Theory, OSPE, Viva Voce
Pre Annual exam	Conducted at the end of Block 3	-	<u>Theory</u> MCQs, SEQs <u>Practical</u> OSPE & Viva voce

TEACHING/LEARNING STRATEGIES

A variety of pedagogies are used in this course, including didactic teaching, and team based and evidence-based learning in classrooms and patient-side environments. Students are encouraged to adopt and inculcate self-learning strategies during the course.

1. Large Group Interactive Sessions (LGIS)
2. Small Group Discussion (SGD) including
 - a) Case presentations
 - b) Case-based Discussion
 - c) Bedside Discussion
3. Self-Directed Learning
4. Skill Lab – Simulation - Based Learning

Venues for learning opportunities

1. Lecture Halls
2. Pathology labs
3. Pathology Museum
4. Libraries including audio-visuals

Attendance & Discipline:

- a. A record of attendance, class test results, end-of-block exams would be maintained and updated regularly.
- b. Students must keep a log of all clinical activities in their clinical logbooks and history journals
- c. Attendance of each student would be endorsed in his/ her logbook.
- d. Overall 75% attendance is mandatory to appear in the final professional exam.

EVALUATION & ASSESSMENT STRATEGIES

Assessment

Assessment is an important aspect of any training program. The performance of each student would be marked and counted towards the final internal assessment. The following tools/ methods would be used for this purpose:

a. Theory

a) **Class tests:** During each module both written will be conducted which will include MCQs and SEQs covering the syllabus covered till the date of class test.

b) **End of block Exam:** At the end of each block a theory (written exam with MCQs and SEQs) would be held concurrently for the entire class from the syllabus covered during this period.

b. Practical

i) Objectively Structured Practical Examination (OSPE)

It is an assessment method used to evaluate the practical skills of students once during each module at the end of written class test and once at the end of written examinations of each module. This is achieved by slides, pathology specimens, pictures/ OSPE cards and practical performance of specific tasks. The students learn actively by applying and integrating their theoretical knowledge in the practical.

ii) **Log Book:** Each student would complete his/her logbook and get it countersigned from the HOD at the end of each block. The logbook is maintained during the teaching sessions.

c. Pre annual & Annual Professional exam:

The preannual exam will be held at the end of the 3rd block and conducted by CIMS. The professional exam will be held by NUMS. There will be 150 marks for the theory paper and 150 marks for the practical. The student has to pass theory and practical separately with a minimum of 50 % marks.

d. Internal assessment: There will be a 20% internal assessment which will be included in the Preannual and Annual professional examination results.

Format/Layout of Modular Exam & Class Test 2024-25

Modular Examination Format:

Theory Exam:

Time Allowed	=3hours
Theory paper	=120 marks
Internal assessment	=30 marks
Total marks	=150
SEQs	=60 Marks (2x9 marks & 7x6 marks)
MCQs	=60 Marks (80x0.75mark)

Time Duration: (theory exam)

SEQs:	1hr 40 min
MCQs:	1hr 20 min

Practical / Viva Exam:

Practical (OSPE)*	= 60 marks
Internal assessment	=30 marks
Viva:	=60 marks
Total marks:	=150

***Marks Distribution (OSPE/Practical)**

- Unobserved stations (OSPE): 14x4marks = 56 marks
- Practical notebook = 4 marks

Class Test

Theory

Examination Format:

Total marks: 50

SEQs: 20 Marks (4x5 marks)

MCQs: 30 Marks (1mark/MCQ)

Time Duration: (60 min)

SEQs: 30 min

MCQs: 30 min

CBL: 10 marks

Attitude/Conduct: 10 marks

Lab SOPs: 5 marks

RECOMMENDED & REFERENCE BOOKS

1. Robins & Cotran Pathologic Basis of Disease, 10th edition
2. Robbins & Cotran Basic Pathology, 11th edition
3. Hoffbrand's Essential Haematology, 8th edition
4. Zilva Clinical Chemistry in Diagnosis & Treatment, 6th edition,

Subject-wise Contact Hours

Subjects	Contact Hours	Self-Directed Learning
Special Pathology	240	20
Community Medicine & Public Health	140	20
Research Method	60	-
Ophthalmology	150	10
ENT	150	10
Medicine	200	10
Surgery	200	10
Obstetrics & Gynecology	50	10
Pediatrics	50	10
Patient Safety	25	-
TOTAL HOURS	1265	100
GENERIC COMPETENCIES		
Communication Skills	15	
Leadership	15	
Teamwork	15	
Ethics	15	
Professionalism	10	
Seminar / CPC	30	
Co-curricular activities/ Sports	100	

Block-wise Tentative distribution Modules
Pathology

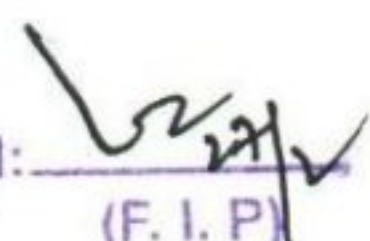
Block 1	
Sr No.	Topics/ themes
1.	Cardiovascular System
2.	Respiratory System
3.	Gastrointestinal System
4.	Urinary System

CARDIOVASCULAR SYSTEM			
Themes/ Topics	Learning Outcomes At the end of each session, the student should be able to:	Course content	Assessment
Cardiovascular system	Correlate the morphology and pathogenesis of cardiac and blood vessel diseases with their etiology and complications Justify the importance of various biochemical markers in the diagnosis of cardiovascular disorders	• Atherosclerosis • Hypertensive Vascular Disease • Aneurysms • Vasculitides • Ischemic Heart Disease • Cardiac Failure • Hypertensive Heart Disease • Rheumatic Fever and Rheumatic Heart Disease • Congenital Heart Disease • Cardiomyopathies • Pericardial Diseases • Tumors of CVS • Types of hypertension • Difference between atherosclerosis Monckeberg's medial calcific sclerosis and Arteriosclerosis • Tetralogy of Fallot and Coarctation of aorta • Mitral valve prolapse • Cardiac markers/ enzymes • Lipids & Lipoproteins	• MCQs • SEQs • Structured Viva • OSPE

RESPIRATORY SYSTEM			
Themes/ Topics	Learning Outcomes At the end of each session, the student should be able to:	Course content	Assessment
Respiratory System	Correlate the morphology & pathogenesis of respiratory disorders with their etiology and complications Justify the importance of various biochemical markers in the diagnosis of metabolic and endocrine disorders	• ARDS • COPD • Asthma & Bronchiectasis • Interstitial Lung Diseases • Pulmonary Vascular Disorders • Pneumonias • Granulomatous Diseases • Lung Cancer • Pleura • Pleural Effusion & Pneumo-Thorax • Hydrothorax, Chylothorax, Haemothorax, and Pleuritis • Pulmonary eosinophilia • Good Pasture Syndrome and Pulmonary infarction • Acid-base disorders	• MCQs • SEQs • Structured Viva • OSPE

ORAL CAVITY AND GASTROINTESTINALTRACT			
Themes/ Topics	Learning Outcomes At the end of each session, the student should be able to:	Course content	Assessment
Oral cavity and Gastrointestinal tract	Analyze the Non-neoplastic and neoplastic lesions of salivary glands and oral cavity based on their etiology and pathogenesis, morphology, and complications Correlate the morphology (Microscopic and macroscopic) of gastrointestinal disorders* to their etiology and pathogenesis *Esophagus, Stomach, Small intestine and large intestine	• Inflammatory, neoplastic, andnon-neoplastic lesions of salivary glands • Tumor and Precancerous Conditions of the Oral Cavity • Motor disorders of the esophagus, varices, esophagitis, and Barrett's esophagus • Tumors of Esophagus • Gastritis and Peptic ulcer Disease • Tumors of Stomach • Malabsorption and celiac disease • Inflammatory Bowel Disease • Enterocolitis • Acute appendicitis • Malignant lesions of small and large intestine	• MCQs • SEQs • Structured Viva • OSPE

URINARY SYSTEM			
Themes/ Topics	Learning Outcomes At the end of each session, the student should be able to:	Course content	Assessment
Urinary System	Correlate the morphology (Microscopic and macroscopic) of urinary disorders to their etiology and pathogenesis Justify the importance of various biochemical markers in the diagnosis of renal disorders	• Glomerular Diseases • Tubulo Interstitial Diseases • Vascular disorders • Congenital and developmental anomalies • Cystic diseases of the kidney • Obstructive Uropathy • Neoplasms of kidney • Congenital anomalies of the ureter and urinary bladder • Neoplastic disorders of ureters and urinary bladder • Hydronephrosis • Acute and Chronic Tubular Necrosis • Wilms tumor • Fluid and electrolyte disorders • Renal Function Tests • Proteinuria and nephrotic/ nephritic syndrome	• MCQs • SEQs • Structured Viva • OSPE

Principal: 

(F. I. P)



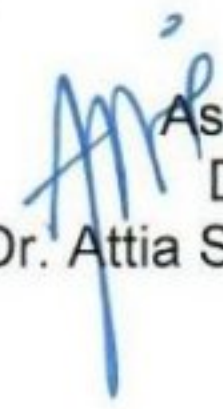
**Updated Tentative Academic Forecast – 4th Year MBBS Class
(Session 2024-25)**

Block I			
Module	Duration	Dates	
		From	To
Block I	10 Weeks	04 Nov 2024	19 Jan 2025
Winter Vacation	01 Week	28 Dec 2024	05 Jan 2025
End of Block I Exam	02 Weeks	Theory Paper: 20 , 22, 24 & 27 Jan 2025 Viva Voce: 28 – 31 Jan 2025	
Block II			
Module	Duration	Dates	
		From	To
Block II	10 Weeks	03 Feb 2025	20 Apr 2025
Sports Week	01 Week	24 Feb 2025	28 Feb 2025
End of Block II Exam	02 Weeks	Theory Paper: 21, 23 , 25 & 28 Apr 2025 Viva Voce: 29 Apr – 02 May 2025	
Block III			
Module	Duration	Dates	
		From	To
Block III	10 Weeks	05 May 2025	27 Jul 2025
Summer Break	02 Weeks	28 Jun 2025	13 Jul 2025
End of Block III Exam	02 Weeks	Theory Paper: 28 Jul, 30 Jul, 01 Aug & 04 Aug 2025 Viva Voce: 05 – 08 Aug 2025	
Pre-Annual and Annual Professional Exams Plan			
Pre Annual Prep Leaves	02 Weeks	09 Aug 2025	24 Aug 2025
Pre Annual Exam	02 Weeks	Theory Paper: 25 Aug, 27 Aug, 29 Aug & 01 Sep 2025 Viva Voce: 02 – 05 Sep 2025	
Annual Prep Leaves	02 Weeks	06 Sep 2025	21 Sep 2025
Annual Exam	22 Sep 2025		

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TW / 5 / CIMS

24 Feb 2025


 Asst Prof
 DD Trg
 (Dr. Attia Sheikh)

AMENDED WEEKLY TRG PROGRAMME OF 4TH YEAR MBBS CLASS (Session 2021-26)
CMH MULTAN INSTITUTE OF MEDICAL SCIENCES MULTAN CANTT

WEEK – 10 (Block – 01)

WEEK – 10 (BLOCK – 01)											
DAY/Date	0800-0845	0845-0930	0930-1025	1025-1045	1055-1230	1240-1325	1325-1355	1355-1500			
MON 13-01-2025	ENT – 1 Revision Lt Col Dr. Majid Dastagir	Ophthalmology – 1 Revision Lt Col Dr. Farooq Ahmad	PATHOLOGY – 1 Pericardial Disease & Tumors of Heart Dr. Fareeha Naseer Syed	Tea Break	Clinical Rotation <u>Coordinators:</u> 1. Medicine (Maj Dr. Ehtasham) 2. Surgery (Brig Dr. Afzal Saeed Awan) 3. Paeds (Dr. Maryam) 4. Gynae/Obs (Maj Dr. Maryam) 5. ENT (Lt Col Dr. Majid Dastagir) 6. Eye (Capt Dr. Kamran Kamboh)	Gynae/Obs Cardiac, Respiratory, Renal & Liver Diseases in Pregnancy Lt Col Dr. Lubna Noor	LUNCH AND PRAYER BREAK	CBL	Patho	Com Med	
TUE 14-01-2025	SURGERY – 1 Differential Diagnosis of Hematemesis (Duodenal & Gestic Ulcer & Gastic Erosions) Col Dr. Usman Ghani	PATHOLOGY – 2 Valvular Heart Disease Dr. Fareeha Naseer Syed	GEN MED –1 Nephrolithiasis Brig Dr. Raja Khalid Mahmood			COMM MED – 1 MCQs Discussion Prof Dr. Hafiz Muhammad Yar		Practical	A	B	
WED 15-01-2025	SURGERY – 2 Abscess / Fissure / Fistula Brig Dr. Muhammad Ali	Ophthalmology – 2 Refractive Errors Prof Dr. M Afzal Bodla	GEN MED – 2 Renal TB Brig Dr. Raja Khalid Mahmood			CBL Clinical Sciences ENT: Batch 01 Eye: Batch 02		Com Health Prog	C	D	
THU 16-01-2025	ENT – 2 Revision Brig Dr. Atif Najam	COMM MED – 2 Epidemiology of Respiratory Diseases Col (R) Dr. Shahnawaz Ateeque	PATHOLOGY – 3 Cardiomyopathies Dr. Fareeha Naseer Syed			CBL Clinical Sciences ENT: Batch 02 Eye: Batch 01			E	A	
									B		
									Patho	Com Med	
									CBL	D	E
									Practical	A	B
									Com Health Prog	-	C

*ALL LECTURES WILL BE DELIVERED IN LECTURE HALL NO. 4.

		Pathology	Community Medicine	ENT	Eye
CBL	Facilitators' Names	Dr. Fareeha Naseer Seyd, Dr. Hamza Ali, Dr. Aimna Saliha	Lt Col (R) Dr. Mustansar Billah, Dr. Shumaila, Dr. Sumeera Najeeb	Lt Col Dr. Majid Dastagir, Brig Dr. Atif Najam	Lt Col Dr. Farooq Ahmad, Prof Dr. M Afzal Bodla
	Venue	Lecture Hall 4/Patho Lab	Tutorial Room 04	Clinical Class Room CMH Mtn	Clinical Class Room CMH Mtn
	Topic	Valvular Heart Disease, Cardiomyopathies	Vaccination of Different Diseases	Revision	Revision
Practical	Facilitators' Names	Prof Dr. Khalid Usman, Dr. Wajeeh Nazar	Col (R) Dr. Shahnawaz Ateeque, Dr. Aiman, Dr. Qaisar	"Academic round for students by Prof Dr. Qaiser Mahmood every Tuesday and Thursday at 1055-1230 Hrs"	
	Venue	Patho Lab	Academic Council Hall		
	Topic	Rheumatic Carditis, MI	Important Vaccines		
Community Health Prog	Facilitators' Names		Prof Dr. Hafiz Muhammad Yar, Dr. Irum Abid, Dr. Shair Baaz		
	Venue		Community Medicine Lab		
	Topic		Research Writing		

No. TW / 5-D / CIMS

10 Jan 2025

To: Pathology Dept, Community Medicine Dept, IT Dept, Research Cell, ENT Dept, Eye Dept, Surgery Dept, Medicine Dept, Gynae/Obs Dept, Clinical Coordinator,
DD Coord Br, Students Affairs Branch & Notice Board

Asst Prof
DD Trg
(Dr. Attia Sheikh)