

AVICENNA MEDICAL & DENTAL COLLEGE

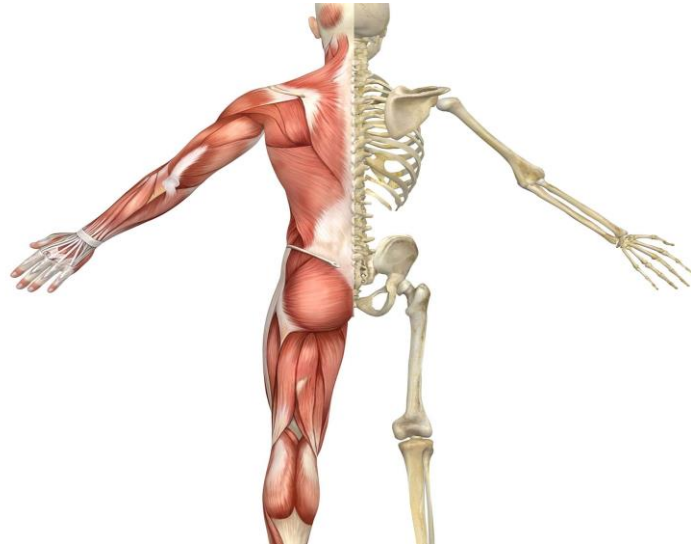


# STUDY GUIDE

2025

## Musculoskeletal & Locomotion II

BLOCK 8- MODULE 18



**Program:** MBBS  
**Year:** 3<sup>rd</sup> Professional Year  
**Batch No:** M-22  
**Session:** 2024-2025

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## List of Abbreviations

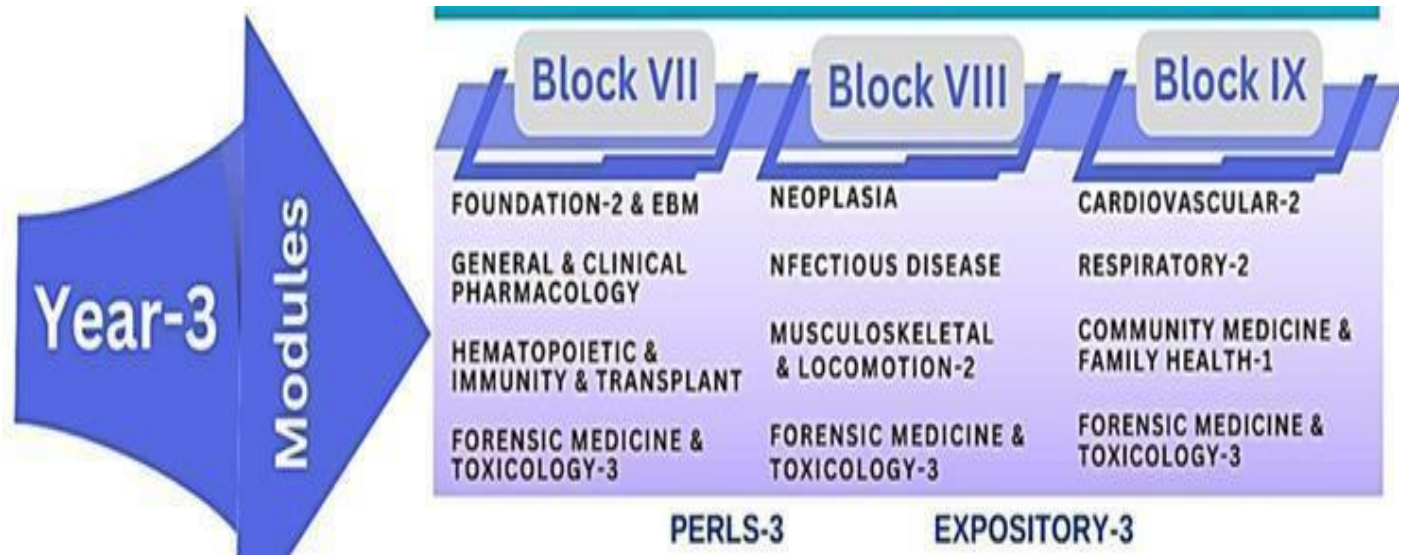
Letter	Abbreviations	Subjects
A	A	Anatomy
	ABCDE	Airway, Breathing, Circulation, Disability, Exposure
	ABG	Arterial blood gas
	ACS	Acute Coronary Syndromes
	Ag	Aging
	AKI	Acute kidney injury
	ALT	Alanine transaminase
	AMI	Acute Myocardial Infarction
	AMP	Adenosine monophosphate
	ANA	Antinuclear Antibody
	ANCA	Anti-neutrophil Cytoplasmic Antibodies
	ANS	Autonomic Nervous System
	AO	Association of osteosynthesis
	APTT	Activated Partial Thromboplastin Clotting Time
	ARDS	Acute Respiratory Distress Syndrom
	ARVC	Arrhythmogenic Right ventricular Cardiomyopathy
	ASD	Atrial Septal Defect
	AST	Aspartate aminotransferase
	ATLS	Advanced Trauma Life Support
	Au	Autopsy
B	AUC	Area under the curve
	AV	Atrioventricular
	B	Biochemistry
	BhS	Behavioral Sciences
C	BHU	Basic Health Unit
	BSL	Biological Safety Level
	C	Civics
	C-FRC	Clinical-Foundation Rotation Clerkship
	C.burnetii	Clostridium burnetii
	C.neoformans	Clostridium neoformans
	C.pneumoniae	Clostridium pneumoniae
	C.psittaci	Clostridium psittaci
	C.trachomatis	Clostridium trachomatis
	CA	cancer
	CABG	coronary artery bypass grafting
	CAD	coronary artery disease
	CBC	Complete Blood Count
	CCR5	cysteine-cysteine chemokine receptor
	CD31	cluster of differentiation 31
	CD34	cluster of differentiation 34
	CD4	cluster of differentiation 4
	CF	cystic fibrosis
	CK	Creatine kinase
	CLED	cystine lactose electrolyte deficient
	CLL	chronic lymphocytic leukemia
	CM	Community Medicine
	CML	chronic myeloid leukemia

	<b>CMV</b>	cytomegalo virus
	<b>CNS</b>	Central Nervous System
	<b>CO</b>	Carbon monoxide
	<b>CO2</b>	Carbon dioxide
	<b>CODIS</b>	combined DNA index system
	<b>COPD</b>	Chronic obstructive pulmonary disease
	<b>COVID-19</b>	Corona Virus Disease 2019
	<b>COX</b>	Cyclooxygenase
	<b>CPR</b>	Cardiopulmonary Resuscitation
	<b>CR</b>	Clinical Rotation
	<b>CRP</b>	Clinical Rotation CSF C- Reactive Protein
	<b>CSF</b>	Cerebro Spinal Fluid
	<b>CT</b>	Computed tomography
	<b>CV</b>	Cardiovascular
	<b>CVA</b>	Cerebral vascular accident
	<b>CVS</b>	Cerebrovascular system
<b>D</b>	<b>D.medinensis</b>	Dracunculus Medinensis
	<b>DALY</b>	Disability-Adjusted Life Year
	<b>DCIS</b>	Ductal Carcinoma in situ
	<b>DCM</b>	Dilated Cardiomyopathy Dorsal Colu
	<b>DCMLS</b>	Dorsal column medial lemniscus system
	<b>DLC</b>	Differential Leukocyte Count
	<b>DMARDs</b>	Disease Modifying Anti Rheumatic Drugs
	<b>DNA</b>	DeoxyRibonucleic Acid
	<b>DOTS</b>	Directly Observed Treatment Short-course
	<b>DTP</b>	Diphtheria, Tetanus, Pertussis
	<b>DVI</b>	Disaster Victim Identification
	<b>DVT</b>	Deep Vein Thrombosis
<b>E</b>	<b>E.coli</b>	Escherichia coli
	<b>ECF</b>	Extracellular Fluid
	<b>ECG</b>	Electrocardiography
	<b>ECP</b>	Emergency contraceptive pills
	<b>ED50</b>	Median Effective Dose
	<b>EEG</b>	Electroencephalogram
	<b>EIA</b>	Enzyme Immunoassay
	<b>ELISA</b>	Enzyme Linked Immunosorbent Assay
	<b>EnR</b>	Endocrinology & Reproduction
	<b>ENT</b>	Ear Nose Throat
	<b>EPI</b>	Expanded Programme on Immunization
	<b>ER</b>	Emergency Room
<b>F</b>	<b>F</b>	Foundation
	<b>FAST</b>	Focused Assessment with Sonography
	<b>FEV1</b>	Forced Expiratory Volume 1
	<b>FM</b>	Family Medicine
	<b>For</b>	Forensic Medicine
	<b>FPIA</b>	Fluorescent Polarization Immunoassay
	<b>FS</b>	Forensic Serology
	<b>FSc</b>	Forensic Science
	<b>FVC</b>	Forced Vital Capacity
<b>G</b>	<b>GCS</b>	Glasgow Coma Scale

	<b>GFR</b>	Glomerular Filtration Rate
	<b>GIT</b>	Gastrointestinal tract
	<b>GL-MS</b>	Gas Liquid Mass Spectrometry
	<b>GLC</b>	Gas Liquid Chromatography
	<b>GLP</b>	Guanosine Monophosphate
	<b>GMP</b>	Guanosine monophosphate
	<b>GO</b>	Gynecology and Obstetrics
	<b>GP</b>	General Practitioner
	<b>GPE</b>	General Physical Examination
	<b>GTO</b>	Golgi Tendon Organ
	<b>Gynae &amp; Obs</b>	Gynecology and Obstetrics
<b>H</b>	<b>H &amp; E</b>	Hematoxylin and eosin
	<b>H. influenzae</b>	Haemophilus influenzae
	<b>H.pylori</b>	Helicobacter pylori
	<b>HAI</b>	Healthcare Associated Infections
	<b>HbC</b>	Hemoglobin C
	<b>HbS</b>	Sickle Hemoglobin
	<b>HbSC</b>	Hemoglobin Sickle C Disease
	<b>HCL</b>	Hydrochloric Acid
	<b>HCM</b>	Hypertrophic Cardiomyopathy
	<b>HHV</b>	Human Herpesvirus
	<b>HIT</b>	Hematopoietic, Immunity and Transplant
	<b>HIV</b>	Human Immunodeficiency Virus
	<b>HL</b>	Hematopoietic & Lymphatic
	<b>HLA</b>	Human Leukocyte Antigen
	<b>HMP</b>	Hexose Monophosphate
	<b>HNSS</b>	Head & Neck and Special Senses
	<b>HPLC</b>	High Pressure Liquid Chromatography
<b>I</b>	<b>ICF</b>	Intra Cellular Fluid
	<b>ID</b>	Infectious Diseases
	<b>IE</b>	Infective Endocarditis
	<b>IL</b>	Interleukin
	<b>ILD</b>	Interstitial Lung Disease
	<b>IN</b>	Inflammation
	<b>INR</b>	International Normalized Ratio
	<b>INSTIs</b>	Integrase Strand Transfer Inhibitors
	<b>IPV</b>	Intrauterine Device
	<b>IUD</b>	Intrauterine device
	<b>IUGR</b>	Intra-Uterine Growth Restriction
<b>J</b>	<b>JVP</b>	Jugular Venous Pulse
<b>L</b>	<b>L</b>	Law
	<b>LD50</b>	Median Lethal Dose
	<b>LDH</b>	Lactate Dehydrogenase
	<b>LSD</b>	Lysergic acid diethylamide
<b>M</b>	<b>M</b>	Medicine
	<b>MALT</b>	Mucosa Associated Lymphoid Tissue
	<b>MBBS</b>	Bachelor of Medicine, Bachelor of Surgery
	<b>MCH</b>	Mean corpuscular hemoglobin
	<b>MCHC</b>	Mean Corpuscular Hemoglobin Concentration
	<b>MCV</b>	Mean Corpuscular Volume
	<b>MHO2001</b>	Mental Health Ordinance 2001
	<b>MoA</b>	Mechanism of action

	<b>MRI</b>	Mechanism of action
	<b>MS</b>	Musculoskeletal
	<b>MSD</b>	Musculoskeletal disorders
	<b>MSDS</b>	Minimum Service Delivery Standards
	<b>MSK</b>	Musculoskeletal
<b>N</b>	<b>N</b>	Neoplasia
	<b>NEAA</b>	Non-Essential Amino Acids
	<b>NK cells</b>	Natural Killer Cells
	<b>NNRTI</b>	Non-nucleoside Reverse Transcriptase Inhibitors
	<b>NRTIs</b>	Nucleoside Reverse Transcriptase Inhibitors
	<b>NS</b>	Neurosciences
<b>O</b>	<b>NSAIDs</b>	Non-steroidal Anti-Inflammatory Drugs
	<b>O</b>	Ophthalmology
	<b>OA</b>	Osteoarthritis
	<b>OPC</b>	Organophosphate
	<b>OPV</b>	Oral poliovirus vaccine
	<b>Or</b>	Orientation
	<b>Orth</b>	Orthopaedic
<b>P</b>	<b>P</b>	Physiology
	<b>P.jiroveci</b>	Pneumocystis jiroveci
	<b>Pa</b>	Pathology
	<b>PAD</b>	Pathology
	<b>PAF</b>	Platelet activating factor
	<b>PBL</b>	Problem Based Learning
	<b>PCH</b>	Psychiatry
	<b>PCR</b>	Polymerase Chain Reaction
	<b>PDA</b>	Patent Ductus Arteriosus
	<b>PDGF</b>	Platelet derived growth factor
	<b>Pe</b>	Pediatrics
	<b>PEM</b>	Protein Energy Malnutrition
	<b>PERLs</b>	Professionalism, Ethics, Research, Leadership
	<b>PET</b>	Positron Emission Tomography
	<b>Ph</b>	Pharmacology
	<b>Ph</b>	Pharmacology
	<b>PI</b>	Personal Identity
	<b>PID</b>	Pelvic inflammatory disease
	<b>PIs</b>	Protease inhibitors
	<b>PMC</b>	Pakistan Medical Commission
	<b>PMDC</b>	Pakistan Medical and Dental Council
	<b>PMI</b>	Post-Mortem Interval
	<b>PNS</b>	Peripheral Nervous System
	<b>PPD</b>	Paraphenylenediamine
	<b>PPE</b>	Personal Protective Equipment
	<b>Psy</b>	Psychiatry
	<b>PT</b>	Prothrombin Time
	<b>PVC</b>	Premature Ventricular Contraction
	<b>PVD</b>	Peripheral Vascular Diseases
<b>Q</b>	<b>QALY</b>	Quality-Adjusted Life Year
	<b>QI</b>	Quran and Islamiyat
<b>R</b>	<b>R</b>	Renal
	<b>Ra</b>	Radiology

	<b>RA</b>	Radiology
	<b>RBCs</b>	Red Blood cells
	<b>RCM</b>	Restrictive Cardiomyopathy
	<b>RDA</b>	Recommended Dietary Allowance
	<b>Re</b>	Respiratory
	<b>RF</b>	Rheumatoid factor
	<b>RFLP</b>	Restriction Fragment Length Polymorphism
	<b>Rh</b>	Rheumatology
	<b>RHC</b>	Rural Health Center
	<b>RIA</b>	Radioimmunoassay
	<b>RMP</b>	Resting Membrane Potential
	<b>RNA</b>	Ribonucleic Acid
	<b>RTA</b>	Road Traffic Accident
<b>S</b>	<b>S</b>	Surgery
	<b>S.pneumonia</b>	Streptococcus pneumoniae
	<b>SA</b>	Sinoatrial
	<b>SCC</b>	Squamous-cell carcinoma
	<b>Se</b>	Sexology
	<b>Sec</b>	Section
	<b>SIDS</b>	Sudden Infant Death Syndrome
	<b>SLE</b>	Systemic Lupus Erythematosus
	<b>SOP</b>	Standard Operating Procedure
<b>T</b>	<b>TB</b>	Tuberculosis
	<b>TBI</b>	Traumatic Brain Injury
	<b>TCA</b>	Tricarboxylic acid cycle
	<b>TCBS</b>	Thiosulphate Citrate Bile salts Sucrose
	<b>TD50</b>	Median Toxic Dose
	<b>TGA</b>	Transposition of the Great Arteries
	<b>Th</b>	Thanatology
	<b>TLC</b>	Thin Layer Chromatography
	<b>TNF</b>	Tumor Necrotic Factor
	<b>TNM</b>	Tumor Necrotic Factor
	<b>TOF</b>	Tetralogy of Fallot
	<b>Tox</b>	Toxicology
	<b>Tr</b>	Traumatology
	<b>TSI</b>	Triple Sugar Iron
<b>U</b>	<b>USG</b>	Ultrasonography
	<b>UTI</b>	Urinary Tract Infections
	<b>UV</b>	Ultraviolet
<b>V</b>	<b>VAP</b>	Ventilator-Associated Pneumonia
	<b>Vd</b>	Volume of Distribution
	<b>VEGF</b>	Vascular Endothelial Growth Factor
	<b>VSD</b>	ventricular septal defect
<b>W</b>	<b>W. bancroft</b>	Wuchereria bancroft
	<b>WBCs</b>	White Blood Cells
	<b>WHO</b>	World Health Organization
<b>Z</b>	<b>ZN Staining</b>	Ziehl-Neelsen Staining





## Introduction to the Study Guide

Welcome to the Avicenna Medical & Dental College Study Guide!

This guide serves as your essential resource for navigating the complexities of your medical education at Avicenna Medical & Dental College. It integrates comprehensive details on institutional framework, curriculum, assessment methods, policies, and resources, all meticulously aligned with UHS, PMDC and HEC guidelines.

Each subject-specific study guide is crafted through a collaborative effort between the Department of Medical Education and the respective subject departments, ensuring a harmonized and in-depth learning experience tailored to your academic and professional growth.

## Objectives of the Study Guide

### 1. Institutional Understanding:

- Gain insight into the college's organizational structure, vision, mission, and graduation competencies as defined by PMDC, setting the foundation for your educational journey.

### 2. Effective Utilization:

- Master the use of this guide to enhance your learning, understanding the collaborative role of the Department of Medical Education and your subject departments, in line with PMDC standards.

### 3. Subject Insight:

- Obtain a comprehensive overview of your courses, including detailed subject outlines, objectives, and departmental structures, to streamline your academic planning.

### 4. Curriculum Framework:

- Explore the curriculum framework, academic calendar, and schedules for clinical and community rotations, adhering to the structured guidelines of UHS & PMDC.

### 5. Assessment Preparation:

- Familiarize yourself with the various assessment tools and methods, including internal exam and external exam criteria, and review sample papers to effectively prepare for professional exams.

### 6. Policies and Compliance:

- Understand the institutional code of conduct, attendance and assessment policies, and other regulations to ensure adherence to college standards and accrediting body requirements.

### 7. Learning Resources:

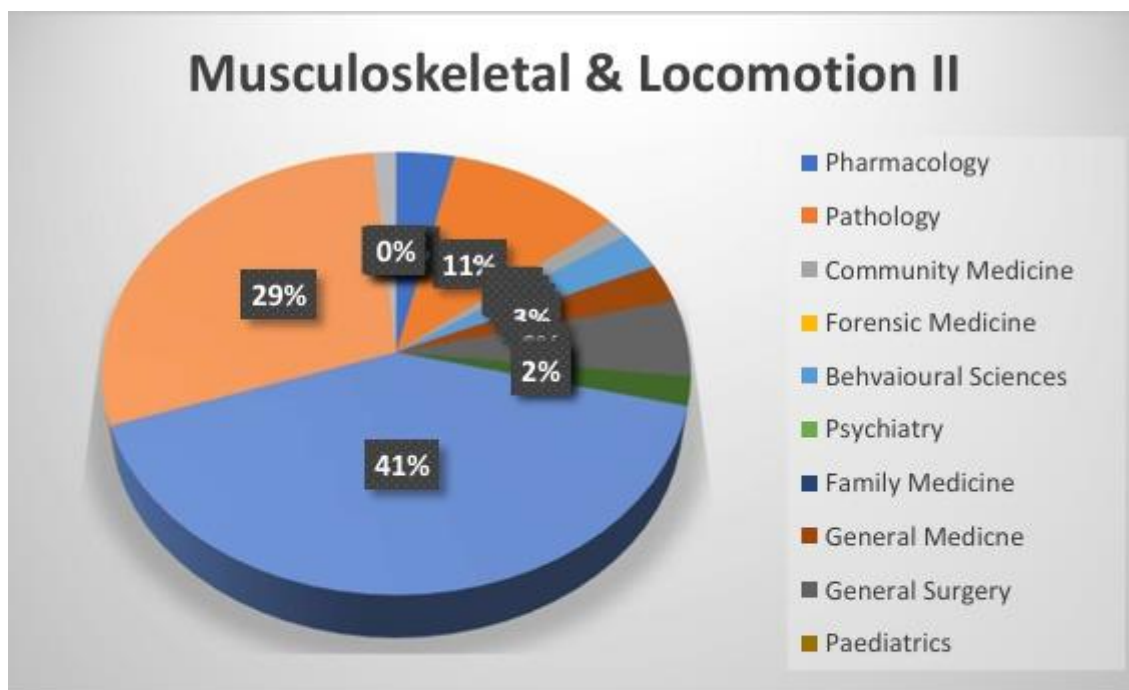
- Utilize the learning methodologies, infrastructure resources, and Learning Management System to maximize your educational experience and academic success.

This guide, meticulously developed in collaboration with your subject departments, is designed to support your academic journey and help you achieve excellence in accordance with the highest standards set by PMDC and HEC.

## Introduction to Module

- The Musculoskeletal & Locomotion II module is designed to deepen medical students' understanding of the musculoskeletal system, integrating knowledge from multiple disciplines to enhance the management of musculoskeletal disorders and injuries.
- This module emphasizes the interconnectedness of various fields, including orthopedics, surgical traumatology, forensic traumatology, and rheumatology, while also incorporating essential subjects such as pathology, pharmacology, community medicine, behavioral sciences, radiology, and evidence-based medicine.
- Integrated Learning: This module promotes an integrated approach to understanding the musculoskeletal system.
- By combining orthopedics, surgical traumatology, forensic traumatology, and rheumatology, students will gain a holistic perspective on diagnosis and treatment, preparing them for the complexities of clinical practice.
- Pathology and Pharmacology: Understanding the underlying pathology of musculoskeletal disorders is essential for effective management.
- This module emphasizes the importance of pathology and pharmacology, equipping students with the knowledge to identify disease mechanisms and select appropriate pharmacological interventions for pain management and inflammation control.
- Community Medicine and Behavioral Sciences: Musculoskeletal disorders significantly impact community health and patient well-being. The module includes community medicine to address the epidemiology, prevention, and health promotion aspects of musculoskeletal conditions.
- Additionally, behavioral sciences will be integrated to enhance understanding of patient behavior, adherence to treatment, and the psychosocial factors affecting recovery.
- Radiology and Evidence-Based Medicine: Proficiency in interpreting radiological findings is crucial for diagnosing musculoskeletal conditions. The module will cover radiological techniques relevant to orthopedics and traumatology, allowing students to correlate imaging results with clinical findings.
- Furthermore, an emphasis on evidence-based medicine will teach students how to critically appraise research and apply findings to clinical decision-making, ensuring the delivery of high-quality patient care.
- Real-World Applications: By focusing on both common and complex musculoskeletal disorders, including those requiring surgical intervention, students will develop the skills necessary to assess and manage a wide range of conditions.

- This prepares them for future roles in various healthcare settings, from primary care to specialized practices.
- Multidisciplinary Collaboration: The management of musculoskeletal disorders often requires a team approach, involving collaboration with specialists in orthopedics, rheumatology, radiology, and rehabilitation.
- This module fosters an appreciation for interdisciplinary teamwork and the importance of effective communication in providing optimal patient care.



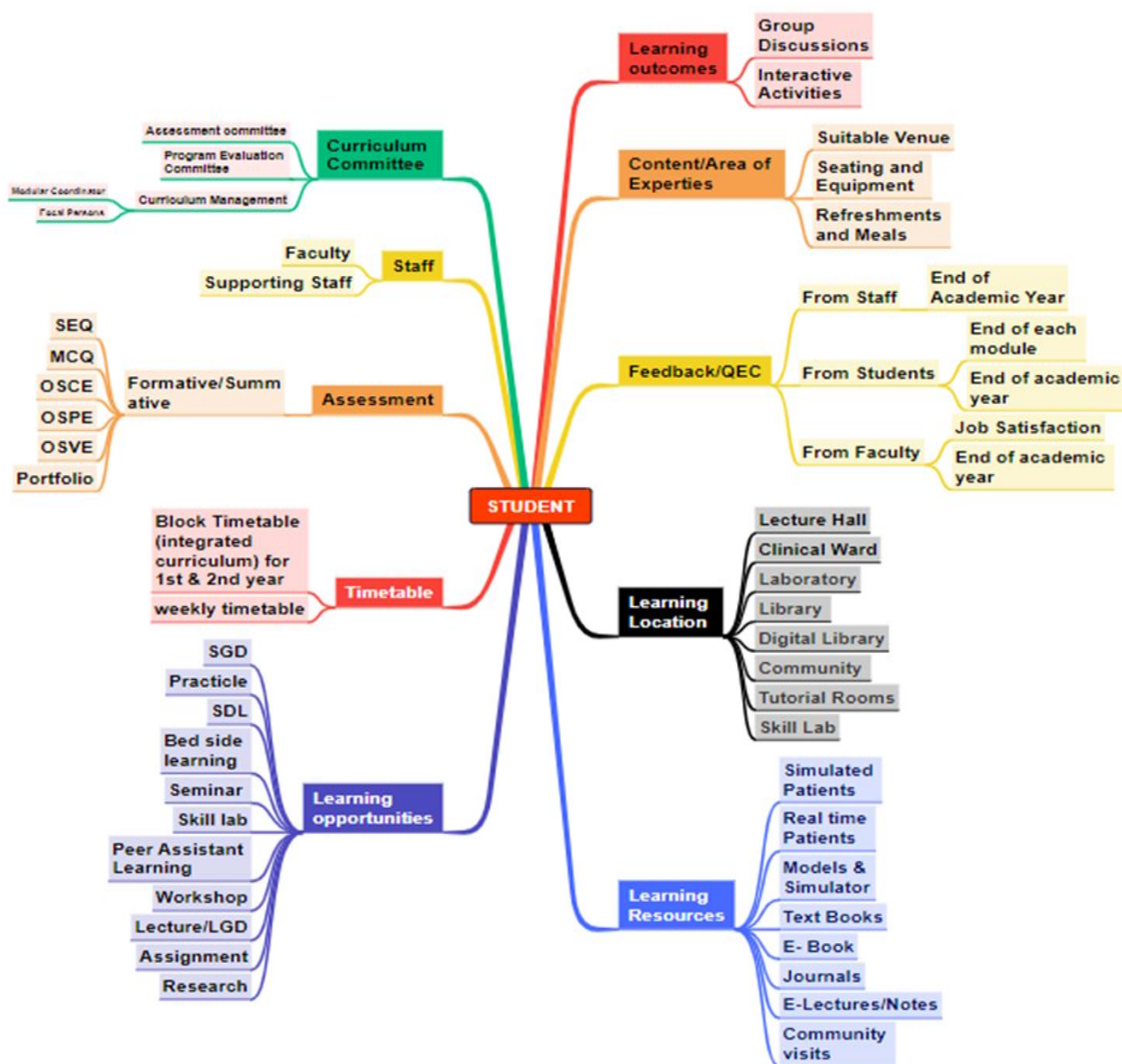
Module Weeks	Recommended Minimum Hours
04	142

## Module Committee


Name	Designation	Department
Prof. Dr. Gulfreen Waheed	Principal & Director	Medical Education
Dr. Saba Iqbal	Associate Director	Medical Education
Dr. Ijlal Zehra	Head	Assessment Cell
Dr. Javaid Shabkhez Rab	Coordinator	Medical Education
Dr. Salar Arsalan	Demonstrator	Medical Education
Dr. Huma Fatima	Demonstrator	Medical Education
Ms. Tamzeela	Co-Coordinator	Medical Education
Mr. Adeel	Head	Student Affairs
Prof. Dr. Saeed Afzal	Head	Pathology
Dr. Majid	Focal Person	Pathology
Prof. Dr. Asma Saeed	Head	Pharmacology
Dr. Azka	Focal Person	Pharmacology
Prof. Dr. Rana Akhtar	Head	Community Medicine
Dr. Usman Sheikh	Focal Person	Community Medicine
Prof. Dr. Zainab	Head	Forensic Medicine
Dr. Anwar	Focal Person	Forensic Medicine
Prof. Dr. Hassan Khan	Head	Surgery Unit-1
Prof. Dr. Khalid Nizami	Head	Surgery Unit-2
Dr. Sumaira	Focal Person	General Surgery
Prof. Dr. Muzammil	Head	Medicine Unit-1
Prof. Dr. Waheed Ahmed	Head	Medicine Unit-2
Dr. Usman	Focal Person	General Medicine
Dr. Usman	Focal Person	Psychiatry
Dr. Usman	Focal Person	Family Medicine
Dr. Farhat	Head	Behavioural Sciences
Dr. Uzma	Focal Person	Paediatrics

## Curriculum Map

This pictorial, vertical and horizontal presentation of the course content and extent shows the sequence in which various systems are to be covered. Curricular map to cover all the subjects and modules and the time allocated to study of the systems for the undergraduate programs offered at four colleges at campus are as follows:



# Timetable

<div><b>AVICENNA MEDICAL &amp; DENTAL COLLEGE</b></div>									
TIME TABLE		M-22 3rd Year MBBS	SESSION 2024-2025						Week-23
DATE	DAY								BLOCK # VIII
									MODULE - 18
DATE	DAY	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-3.30	
18-Aug	MON	LECTURE PATHOLOGY  LECTURE HALL3	CFRC  CLINICAL ROTATION PRACTICAL		LECTURE PATHOLOGY  LECTURE HALL3	BREAK	LECTURE SURGERY  LECTURE HALL3	TUTORIAL IN 3 BATCHES	
19-Aug	TUE	8.00-9.00	9.00-10.00	10.00-10.30	10.30-11.30	11.30-12.30	12.30-1.30	1.30-3.30	
		LECTURE MEDICINE  LECTURE HALL3	LECTURE PATHOLOGY  LECTURE HALL3	BREAK	LECTURE PERLS  LECTURE HALL3	TUTORIAL IN 3 BATCHES	CFRC  CLINICAL ROTATION PRACTICAL		
20-Aug	WED	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-3.30	
		LECTURE PHARMACOLOGY  LECTURE HALL3	LECTURE PATHOLOGY  LECTURE HALL3	LECTURE FOR.MEDICINE  LECTURE HALL3	LECTURE PERLS  LECTURE HALL3	BREAK	CFRC  CLINICAL ROTATION PRACTICAL		
21-Aug	THU	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00		BREAK	12.30-1.30	1.30-3.30
		LECTURE PATHOLOGY  LECTURE HALL3	LECTURE MEDICINE  LECTURE HALL3	LECTURE PATHOLOGY  LECTURE HALL3	LECTURE PHARMACOLOGY  LECTURE HALL3	LECTURE SURGERY  LECTURE HALL3		TUTORIAL IN 3 BATCHES	
22-Aug	FRI	8.00-9.00	9.00-10.00	10.00-11.00	12.00-1.00		1.00-2.00	2.00-3.30	
		LECTURE FOR.MEDICINE  LECTURE HALL3	LECTURE SURGERY  LECTURE HALL3	LECTURE PATHOLOGY  LECTURE HALL3	LECTURE PATIENT SAFETY  LECTURE HALL3		JUMMA BREAK	SDL	
Prepared by DME									



## Allocation of Hours

week#	Pharmacology	Pathology	For.Medicine	Com.Medicine	Beh. Science	Surgery	Medicine	Paeds	Gynae	Bio	Phy	PERLs	Patient Safety	Clinical Rotation/ Practical	Tutorial	Assessment	SDL
Week-1	5	6	3	1	1	1	1					1	1	7	6		4
Week-2	5	6	2	1		1	1			1	1	1	1	7	6		4
Week-3																	
Week-4	5	5	2	1	1	1				1	1	2	1	7	6		4
Week-5	4	5	2	1			1			1		1	1	7	6	4	4
Week-6	5	5	2	1			1					2	1	7	5	4	4
Week-7	4	3	2	1						1		1		7	3.5	4	3
Week-8	5	5	2	1		1				1		1		7	6	4	4
Week-9	5	5	2	1		1								7	6	4	4
Week-10	5	5	2			1						1		7	6	4	4
Week-11	4	4	2									1	1	5	5.5	7	4
Week-12	3	6	2		1	1	1					1		7	4		4
Week-13	3	6	2			1	1	1		1			1	5	4.5		3
Week-14	3	6	2			1	1		1			1	1	7	6	4	4
Week-15	3	6	2	1		1	1					1	1	7	6	4	4
Week-16	3	6	2	1			1					1	1	7	6	4	4
Week-17	2	6	2	1		1	1	1				1	1	7	6	4	4
Week-18	2	6	2			1	1		1			1	1	7	6	4	4
Week-19																	
Week-20																	
Week-21																	
Week-22																	
Week-23	2	7	2			3	2					1	1	7	7		4
Week-24	2	6	2			2	2					1	1	7	6	4	4
Week-25	2	5	2			1	1							7	4	4	4
Week-26	2	6	2			2	2					1	1	7	6	4	4
Week-27	1	2	1	2	1	2	2					1	1		5.5	7	3
Week-28	1	2	1	2		1	1					2	1	7	7		4
Week-29	2	2	1	2			2						1	7	5.5	4	4
Week-30	1	2	1	3	1		1						1	7	5.5	4	4
Week-31	2	2	1	2		1	1					1		7	5.5	4	4
Week-32	2	2	2	3								1		7	5.5	4	4
Week-33	1	2	2	3		1						1		7	5.5	4	4
Week-34	2	2	2	2		1	2					2	1	7	7	4	4
Week-35	2	2	2	3		1	2					1	1	7	7	4	4
Week-36	2	2	2	2		2	3					1	1	7	7	4	4
Week-37	2	2	2	3		1	2					1	1	7	7	4	4
Week-38	2	2	2	2		1	2					2	1	7	7	4	4
Week-39	2	2	2			1	3					3		7	7	4	4
Week-40														2.5	1	7	2
Total Hours	96	141	64	40	5	32	39	2	2	6	2	36	24	229.5	200.5	121	135

## Modular Outcomes

Module Name	Modular Outcomes
<p>Block 8</p> <p>Module 18</p> <p>Musculoskeletal &amp; locomotion II</p>	<ul style="list-style-type: none"><li>● Explain the pathology and underlying mechanisms of common musculoskeletal disorders and injuries, including septic arthritis, osteomyelitis, fractures, and degenerative conditions.</li><li>● Identify key features of various musculoskeletal disorders, including their clinical presentations, epidemiology, and impact on community health.</li><li>● Perform thorough musculoskeletal examinations to assess joint mobility, strength, and functional capabilities.</li><li>● Interpret relevant imaging studies (e.g., X-rays, MRI, CT scans) to aid in the diagnosis and management of musculoskeletal conditions.</li><li>● Apply appropriate first aid measures for common musculoskeletal injuries, including immobilization techniques and pain management strategies.</li><li>● Integrate knowledge from orthopedics, surgical traumatology, forensic traumatology, and rheumatology to develop comprehensive management plans for patients with musculoskeletal conditions.</li><li>● Collaborate effectively with healthcare professionals from diverse specialties, including pathology, pharmacology, community medicine, behavioral sciences, and radiology, to enhance patient care.</li></ul>



- |  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>• Critically evaluate and apply current evidence-based guidelines and research findings to inform clinical decision-making in the management of musculoskeletal disorders.</li><li>• Formulate treatment plans that incorporate pharmacological and non-pharmacological interventions based on best practices and individual patient needs.</li><li>• Demonstrate empathy and effective communication skills when interacting with patients suffering from musculoskeletal disorders, ensuring a patient-centered approach to care.</li><li>• Educate patients about their conditions, treatment options, and the importance of adherence to management plans for optimal outcomes.</li><li>• Recognize the ethical considerations and challenges in the management of</li><li>• musculoskeletal disorders, including issues related to informed consent, patient autonomy, and resource allocation.</li><li>• Exhibit professionalism in all interactions with patients, families, and healthcare team members, promoting a culture of respect and trust.</li></ul> |
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## Learning Objectives

Week No.	Total Hours	Mode of Teaching	Code	Learning Objective	Topic	Reference	Facilator
Week:23	PHARMACOLOGY						
Week:23	1	Lecture	fFor3-Tox-015	Classify barbiturates.	sedative hypnotics	Katzung edition 16	Dr.Asma Saeed
Week:23	2	Lecture	fFor3-	revision	revision	Katzung edition 16	Dr. Azka Khan
Week:23	3	Tutorial	Tox-015	revision	revision	Katzung edition 16	demonstrators
Week:23	PATHOLOGY						
Week:23	4	Lecture	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Pox virus, herpes, hepadna	Viral Infectious Agents	LEVINSON 18TH EDITION	DR UJALA
Week:23	5	Lecture	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Picornavirus, hepevirus, calicivirus, reovirus	Viral Infectious Agents	LEVINSON 18TH EDITION	DR UJALA
Week:23	6	Lecture	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Retrovirus, flaviviruses, togaviruses	Viral Infectious Agents	LEVINSON 18TH EDITION	DR UJALA

Week:23	7	Lecture	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Coronavirus, delta virus, paramyxovirus, rhabdovirus, orthomyxovirus, filovirus	Viral Infectious Agents	LEVINSON 18TH EDITION	DR UJALA
Week:23	8	Lecture	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Picornavirus, hepevirus, calicivirus, reovirus	Viral Infectious Agents	LEVINSON 18TH EDITION	DR UJALA
Week:23	9	Lecture	MS2-Rh-5	Define Systemic Inflammatory Vasculitis. Describe the pathophysiology of Systemic Inflammatory Vasculitis.	Pathology	Systemic Inflammatory Vasculitis.	DR NADIA
Week:23	10	Lecture	MS2-Rh-5	Identify types of Systemic Inflammatory vasculitis, Explain risk factors for Systemic Inflammatory Vasculitis.	Pathology	Systemic Inflammatory Vasculitis.	DR NADIA
Week:23	11	Tutorial	ID-Pa-4	Explain the morphological, pathological and diagnostic aspects of; Picornavirus, hepevirus, calicivirus, reovirus	Viral Infectious Agents	LEVINSON 18TH EDITION	DEMONSTRATOR
Week:23	12	Tutorial	ID-Pa-4	Explain the morphological, pathological and diagnostic	Viral Infectious Agents	LEVINSON 18TH EDITION	DEMONSTRATOR

				aspects of; Picornavirus, hepevirus, calicivirus, reovirus			
Week:23	FOR.MEDICINE						
Week:23	13	Lecture	For2-Se-006	<p>Classify sexual offenses (natural, un-natural and perversions) and explain their medico legal importance. Describe sexual perversions and identify the traits.</p> <p>Reproduce different sections of law relevant to sexual offenses.</p> <p>Explain Medico-legal examination of a victim of sexual assault and issue report. Describe Medico-legal examination of the alleged accused of rape and issue report</p>	Sexual Offenses	Parikh 7th Ed. Ch. 27	Dr. Zainab
Week:23	14	Lecture	For2-Se-006	<p>Know the Medico-legal examination in unnatural sexual offence.</p> <p>Outline collection, preservation and dispatch of specimens in cases of sexual assaults to chemical examiner. Interpret Psycho-pathology of assailant Interpret Psycho-pathology of victim Undertake initial management &amp; referral of victim.</p>	Sexual Offenses	Parikh 7th Ed. Ch. 28	Dr. Zainab

Week:23	15	Tutorial	For2-Tr-037	Recognize different patterns of Chemical burns over body. Apply relevant sections of Qisas And Diyat Act.	Chemical Burns	Parikh 7th Ed. Ch. 22	Demonstrators
Week:23	PERLs						
Week:23	16	Lecture	Identification of Research Problem		Lecture Presentation	Dr. Saba Iqbal	
Week:23	SURGERY						
Week:23	17	Lecture	MS2-Orth013	Describe pathophysiology of primary and secondary brain injury.	Traumatic Brain Injury (TBI)	B & L	Dr. shahzeena
Week:23	18	Lecture	MS2-Orth014	Define Neck and Spine Trauma and classify it. Recognize mechanisms of neck and spine trauma.	Traumatic Brain Injury (TBI)	B & L	Dr. Halima
Week:23	19	Lecture	MS2-Orth014	Recognize role of ATLS in spinal trauma management.Outline complications of spine trauma.	Traumatic Brain Injury (TBI)	B & L	Dr. Amina
Week:23	Patient Safety						
Week:23	20	Lecture	PERL	Discuss the ethical considerations in clinical trials, including the importance of informed consent, patient safety, and drug safety throughout the trial process.	Ethical clinical trials, drug safety in trials		Dr. Usman

<b>Week:23</b>	<b>RADIOLOGY</b>					
<b>Week:23</b>	<b>21</b>	<b>Lecture</b>	<b>MS2-Orth011</b>	<b>Identify indications for rapid imaging in trauma assessment.</b>	<b>Primary Survey and ATLS</b>	<b>Radiology Faculty</b>
<b>Week:23</b>	<b>MEDICINE</b>					
<b>Week:23</b>	<b>22</b>	<b>Lecture</b>	<b>MS2-Rh002</b>	<b>Describe the pathophysiology of Rheumatoid Arthritis (RA).Identify clinical features of Rheumatoid Arthritis (RA). Explain diagnostic criteria for Rheumatoid Arthritis (RA). Differentiate Rheumatoid Arthritis (RA) from other inflammatory joint diseases.</b>	<b>Rheumatoid Arthritis (RA)</b>	<b>Prof. Dr. Muzammil</b>
<b>Week:23</b>	<b>23</b>	<b>Lecture</b>	<b>MS2-Rh003</b>	<b>Explain the pathogenesis of Osteoarthritis (OA). Identify clinical manifestations of Osteoarthritis (OA). Discuss diagnostic methods for Osteoarthritis (OA). Explain the community burden of Osteoarthritis (OA). Identify risk factors for Osteoarthritis (OA).</b>	<b>Osteoarthritis (OA)</b>	<b>Prof. Dr.Amina</b>
<b>Week:23</b>	<b>SDL</b>					
<b>Week:23</b>	<b>24</b>	<b>Self Directed Learning</b>				

Week:23	25	Self Directed Learning					
Week:23	26	Self Directed Learning					
Week:23	27	Self Directed Learning					
Week:23	CLINICAL ROTATION / PRACTICAL						
Week:23	28	PRACTICAL	For2-Tr-038	Identify different kinds of ligature materials used for hanging Recognize different types of hanging	Hanging	Parikh 7th Ed. Ch. 13 Practical copy	Demonstrators
Week:23	29	PRACTICAL	For2-Tr-038	Identify different kinds of ligature materials used for hanging Recognize different types of hanging	Hanging	Parikh 7th Ed. Ch. 13 Practical copy	Demonstrators
Week:23	30	PRACTICAL	ID-Pa-013	Identify and describe the organisms that grow on the Blood agar, Chocolate agar, nutrient agar, TCBS, MacConkey media, LJ media. CLED, TSI, UREASE, CITRATE. blood culture bottle and anaerobic jar	Culture sensitivity	Practical copy	Demonstrators
Week:23	31	PRACTICAL	ID-Pa-013	Identify and describe the organisms that grow on the Blood agar, Chocolate agar, nutrient agar, TCBS, MacConkey media, LJ media. CLED, TSI, UREASE, CITRATE. blood culture bottle and anaerobic jar	Culture sensitivity	Practical copy	Demonstrators



Week:23	32	CLINICAL ROTATION	Knowledge of common drug classes relevant to foundational clinical care (e.g., antibiotics, analgesics, antihypertensives).			Log Book	Medical Faculty
Week:23	33	CLINICAL ROTATION	Knowledge of common drug classes relevant to foundational clinical care (e.g., antibiotics, analgesics, antihypertensives).			Log Book	Medical Faculty
Week:23	34	CLINICAL ROTATION	Knowledge of common drug classes relevant to foundational clinical care (e.g., antibiotics, analgesics, antihypertensives).			Log Book	Medical Faculty
Week:23	35	CLINICAL ROTATION	Knowledge of common drug classes relevant to foundational clinical care (e.g., antibiotics, analgesics, antihypertensives).			Log Book	Medical Faculty
Week:23	WHOLE CLASS TUTORIAL (Pharmacology)						
Week:23	36	Tutorial	Tox-015	revision	revision	Katzung edition 16	demonstrators
Week:23	37	Tutorial	Tox-015	revision	revision	Katzung edition 16	demonstrators

## Operational Definitions

### Traditional & Innovative Teaching Methodologies

Sr.	Pedagogical Methodologies	Description
1.	Lectures	Traditional method where an instructor presents information to a large group of students (large group teaching). This approach focuses on delivering theoretical knowledge and foundational concepts. It is very effective for introducing new topics.
2.	Tutorial	Tutorials involve small group discussion (SGD) where students receive focused instruction and guidance on specific topics.
3	Demonstrations	Demonstrations are practical displays of techniques or procedures, often used to illustrate complex concepts or practices, particularly useful in dental education for showing clinical skills.
4	Practicals	Hands-on sessions where students apply theoretical knowledge to real-world tasks. This might include lab work, clinical procedures, or simulations. Practicals are crucial for developing technical skills and understanding the application of concepts in practice.
5.	Student Presentations	Students prepare and deliver presentations on assigned topics. This method enhances communication skills, encourages students to explore topic in-depth. It also provides opportunities for peer feedback and discussion.
6.	Assignment	Tasks given to students to complete outside of class. Assignments can include research papers, case studies, or practical reports. They are designed to reinforce learning, assess understanding, and develop critical thinking and problem-solving skills.
7.	Self-directed Learning	Students take initiative and responsibility for their own learning process. Students are encouraged to seek resources, set goals, and evaluate their progress. This is a learner-centered approach where students take the initiative to plan, execute, and assess their own learning activities. This method promotes independence, critical thinking, and lifelong learning skills.

8.	Flipped Classroom	In this model, students first engage with learning materials at home (e.g., through videos, readings) and then use class time for interactive activities, discussions, or problem-solving exercises. This approach aims to maximize in-class engagement and application of knowledge.
9.	Peer-Assisted Learning (PAL)	A collaborative learning approach where students help each other understand course material. PAL involves structured peer tutoring, study groups, or collaborative tasks. It enhances comprehension through teaching, reinforces learning, and builds teamwork skills.
10.	Team-based Learning (TBL)	A structured form of small group learning where students work in teams on application-based tasks and problems. Teams are responsible for achieving learning objectives through collaborative efforts, promoting accountability, and deeper understanding of the material.
11.	Problem-based Learning (PBL)	Students work on complex, real-world problems without predefined solutions. They research, discuss, and apply knowledge to develop solutions. PBL fosters critical thinking, problem-solving skills, and the ability to integrate knowledge from various disciplines.
12.	Academic Portfolios	<p>A collection of student's work that showcases learning achievements, reflections, and progress over time.</p> <p>Portfolios include assignments, projects, and self-assessments. They provide a comprehensive view of student development, highlight strengths and areas for improvement, and support reflective learning (experiential learning)</p>
13.	Seminar	A seminar is an academic or professional setting where individuals discuss, present, and explore specific topics, often with expert guidance

**AVICENNA MEDICAL & DENTAL COLLEGE**  
**DEPARTMENT OF MEDICAL EDUCATION**

Internal Assessment Policy

## **Introduction**

This policy outlines the guidelines for internal assessment of students at Avicenna Medical and Dental College. Internal assessment plays a crucial role in evaluating a student's progress, understanding their strengths and weaknesses, and providing timely feedback. This policy aims to ensure fairness, consistency, and transparency in the internal assessment process.

## **Internal Assessment Components**

The internal assessment for each course will be comprised of the following components:

### **1. Attendance**

- Attendance will be recorded regularly and will contribute to the overall internal assessment score.
- Students are expected to maintain a minimum attendance of 75% to be eligible for internal assessment marks.

### **2. Continuous Assessment**

- Continuous assessment will be based on regular assignments, quizzes, presentations, and other activities conducted throughout the semester.
- These assessments will evaluate students' understanding of the course material, their critical thinking skills, and their ability to apply knowledge to real-world scenarios.

### **3. Grand Test and Module Exams**

- Grand tests and module exams will be conducted to assess students' comprehensive understanding of the course content.
- These exams will be designed to evaluate both theoretical knowledge and practical skills.

### **4. Attitude and Behavior**

- Students' attitude towards learning, participation in class activities, and adherence to college rules and regulations will be assessed.
- This component will evaluate students' professionalism, teamwork skills, and ethical conduct.

## 5. Logbook and Portfolio

- Students will be required to maintain a logbook and portfolio to document their learning journey.
- The logbook will include reflections on lectures, tutorials, and practical sessions.
- The portfolio will showcase students' best work, including assignments, projects, and research papers.

### Assessment Criteria and Weighting

The following table outlines the weighting of each component in the internal assessment:

Component	Marks	Percentage
Attendance	6	2%
Continuous Assessment	12	4%
Grand Test and Module Exams	30	10%
Attitude and Behavior	10	3%
Logbook and Portfolio	2	1%
Total	60	20%

## Assessment Procedures

- **Faculty Responsibility:** Faculty members will be responsible for designing and administering the internal assessments in accordance with the course syllabus and this policy.
- **Marking and Grading:** Faculty members will mark and grade the assessments using a transparent and consistent marking scheme. Candidates shall be required to score at least 50% marks in the internal assessment in each subject to become eligible for admission to professional examinations.
- **Feedback:** Faculty members will provide timely and constructive feedback to students on their performance.
- **Record-Keeping:** Faculty members will maintain accurate records of all internal assessments, including marks and feedback.
- **Moderation:** Internal assessments will be moderated by the course coordinator or the head of the department to ensure fairness and consistency.

## Appeal Process

Students who have concerns about their internal assessment marks may appeal to the concerned faculty member or the head of the department. The appeal process will be handled promptly and fairly.

The internal assessment policy is designed to promote student learning, assess their progress, and provide a fair and transparent evaluation system. Faculty members and students are expected to adhere to this policy to ensure the integrity of the internal assessment process.

## Attendance Requirement & Internal Assessment Criteria

The institution follows the regulations for examinations of the UHS in letter and spirit. The students require **75% attendance** in all academic sessions and **50% passing marks** with internal assessments and send-up examinations to be eligible for the UHS Professional Examinations.

## Assessment Guidelines

Assessment in medical & dental education is a critical component designed to ensure that medical & dental students acquire the necessary knowledge, skills, and competencies required for effective medical & dental practice.

*Assessment drives learning! – George E. Millar*

You will encounter a variety of assessment methods, each serving a specific purpose.

- Written examinations, including multiple-choice and essay questions, will test your grasp of theoretical concepts and subject matter.
- Practical assessments will require you to demonstrate your clinical skills and ability to apply knowledge in real-world scenarios.

- Clinical exams will evaluate your communication skills and reasoning abilities through case discussions and problem-solving exercises.
- Clinical skills and work-place based assessments will observe your hands-on proficiency and patient management capabilities.

At Avicenna Medical & Dental College, internal assessments are systematically conducted throughout each academic year of the MBBS program, as per the guidelines established by the University of Health Sciences (UHS). These assessments, overseen by the Assessment Cell, adhere to either the Annual Subject-Based System or the Integrated/Modular System, depending on the curriculum structure.

Notably, beginning with the 2024-25 academic year, the weightage of internal assessments will be increased from 10% to 20%. The UHS administers professional examinations independently, organizing them at designated neutral sites and appointing external examiners to ensure objectivity and fairness.

<b>Internal Assessment Weightage</b>	20%	100%
<b>External Assessment Weightage</b>	80%	



<div><div>Avicenna Medical &amp; Dental College</div><div>3rd Year MBBS (M-22)</div><div>Test Schedule Block-8</div></div>					
Week	Date	Day	Subject	Test	Topic
12th	3-Jun-25	Tue	All Subjects	Lecture	Lecture Time Divided
13th	10-Jun-25	Tue	All Subjects	Lecture	Lecture Time Divided
14th	17-Jun-25	Tue	Pathology	Grand Test OSPE+VIVA	Neoplasia,Gram positive bacteria
15th	24-Jun-25	Tue	For.Medicine	Grand Test OSPE+VIVA	General Trauma and Firearm injuries
16th	1-Jul-25	Tue	Pharamcology	Grand Test  OSPE+VIVA	Cell cycle specific and non-specific antitumor agents, cell wall inhibitors,protein synthesis inhibitors, ATT,Leprsosy, antiprotozoal drugs,anti-helminthic drugs, Anti-Fungal drugs, Antiviral Agents, DRUGS IN PUO, Drugs used in GIT Infections, respiratory tract infections, drugs used in STDs
17th	8-Jul-25	Tue	Pathology	Grand Test OSPE+VIVA	GNR-1,Parasitology,Mycology
18th	15-Jul-25	Tue	For.Medicine	Grand Test OSPE+VIVA	Regional Injuries, Accidents in home and environment, Road traffic accidents, Battered
19th	Summer Vacations-20th July -17th Aug ,2025				
20th	Summer Vacations-20th July -17th Aug ,2025				
21st	Summer Vacations-20th July -17th Aug ,2025				
22nd	Summer Vacations-20th July -17th Aug ,2025				
23rd	19-Aug-25	Tue	All Subjects	Lecture	Lecture Time Divided
24th	26-Aug-25	Tue	Surgery	Grand Test OSPE+VIVA	All the covered topics
24th	29-Aug-25	Fri	Pharamcology	Grand Test OSPE+VIVA	MSK Drugs & Interventions, Pharmacologic Management in Rheumatology, sedative hypnotics
25th	2-Sep-25	Tue	Medicine	Grand Test OSPE+VIVA	All the covered topics
26th	9-Sep-25	Tue	Pathology	Grand Test OSPE+VIVA	GNR-2,Virolog,MSK
26th	12-Sep-25	Fri	Integrated	Module Exam: VIVA/OSPE	Whole Syllabus
27th	16-Sep-25	Tue	Integrated	Block-8 Exam	Whole Syllabus of Module- 16,17,18,19
	17-Sep-25	Wed		OSPE+VIVA	
End Of Block-8					



Table of Specification

MBBS 3 <sup>rd</sup> Professional							
Block-8							
Subject	Written Exam			Oral/Practical/Clinical Exam			
	MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE /OSCE (8 marks each observed)	OSCE (10 marks each observed)	OSVE (14 marks each observed)	Marks
Pharmacology	12	02	22	03	-	01	38
Pathology	30	05	55	04	-	02	60
Family Medicine	-	-	-	-	-	-	-
Community Medicine	04	-	04	-	-	-	-
Surgery	15	01	20	01	-	-	08
Medicine	15	01	20	01	-	-	08
Forensic	10	01	15	01	-	-	08
Behavioral	02	-	02	-	-	-	-
Patient Safety	02	-	02	-	-	-	-
CFRC	-	-	-	01	-	-	08
PERLs + Expository	-	-	-	-	01	-	10
<b>Total</b>	<b>90</b>	<b>10x5=50</b>	<b>140</b>	<b>11 stations x 08 = 88</b>	<b>01 stations x 10 = 10</b>	<b>03 stations x 14=42</b>	<b>140</b>

YEAR-3		
A.	<b>Block 7</b> (Foundation-II + Hematopoietic, Immunity & Implant + General Pharmacology + Forensic Medicine & Toxicology-I)	<b>Marks</b>
		350
B.	<b>Block 8</b> (Musculoskeletal & Locomotion-II + Infectious Diseases + Neoplasia + Forensic Medicine & Toxicology - II)	350
C.	<b>Block 9</b> (Cardiovascular-II + Respiratory II + Community Medicine & Public Health + Family Medicine I + Forensic Medicine & Toxicology - III)	350
	<b>Total</b>	1050

## Recommended Books & Reading Resources

### **Anatomy**

Snell's Clinical Anatomy 10th ed.

Langman's Medical Embryology 12th ed

Medical Histology by Laiq Hussain Siddiqui 8th edition.

General Anatomy by Laiq Hussain Siddiqui 6th edition.

### **Biochemistry**

Harpers illustrated Biochemistry (latest edition). Rodwell.V.W MCGrawHill publishers.

Lippincott illustrated Review (latest edition). Kluwer.W.

Essentials of Medical Biochemistry vol 1&2 by Mushtaq Ahmed.

### **Pathology**

Vinay Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pathologic basis of disease. WB Saunders.

Robbins and Cotran Pathological Basis of Disease. Kumar, V., Abbas, A. and Aster, J. Latest Edition

Richard Mitchell, Vinay Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pocket Companion to Pathologic basis of diseases, Saunders Harcourt.

Walter and Israel. General Pathology. Churchill Livingstone.

Robbins & Kumar, Medical Microbiology and Immunology Levinson.

## **General Medicine**

Principles and Practice of Medicine by Davidson (latest edition)

Clinical Medicine by Parveen J Kumar & Michael Clark

Oxford Handbook of Medicine

Macleod's Clinical Examination book

Medicine and Toxicology by C.K. Parikh

Hutchison's Clinical Methods by Michael Swash. 21st edition

## **Pharmacology And Therapeutics**

Katzung and Trevor's Pharmacology: Examination and Board Review- 15th Edition

Basic and Clinical Pharmacology by Bertram G Katzung (case scenarios only) - 16th Edition-

Current Medical Diagnosis and Treatment- reference book –Edition-2024

Basic and Clinical Pharmacology by Bertram G Katzung (case scenarios only) - 15th Edition

Basic and Clinical Pharmacology by Katzung, McGraw-Hill. 16th Edition.

Pharmacology by Champe and Harvey, Lippincott Williams & Wilkins 8th Edition.

Katzung Basic and Clinical pharmacology, Lippincott Illustrated reviews.

Clinical Pathology Interpretations by A. H. Nagi

### **Behavioural Sciences**

Handbook of Behavioural Sciences by Prof. Mowadat H.Rana, 3rd Edition

Medical and Psychosocial aspects of chronic illness and disability 6th edition by Donna R.Falvo and Beverly E.Holland,

Integrating behavioral sciences in healthcare, Asma Humayun,2003, 1st edition

### **Community medicine**

Parks Textbook of Preventive and Social Medicine. K. Park

Public Health and Community Medicine by Ilyas Ansari

MSDS manual of Government of Punjab

Text book of Community Medicine by Park J E. Latest Edition

### **Surgery**

Bailey & Love's Short Practice of Surgery (latest edition)

Browse's Introduction to the Symptoms & Signs of Surgical Disease 4th Edition

Bailey & Love Short Practice of Surgery, Clinical Surgery pearls by Dayananda Babu RACS for Surgical Audits.

### **Patent Safety**

Patient Safety Curriculum Guide: Multi Professional Guide

## **Microbiology**

Levinson's review of Microbiology

Medical Microbiology and Immunology by Levinson and Jawetz,

## **Pediatrics Medicine**

Nelson Textbook of Pediatrics

Basis of Pediatrics by Pervez Akbar Khan

## **Gynecology**

Gynecology by Ten Teachers

## **Infection Control**

National Guidelines Infection Prevention and control, National Institute of Health Pakistan

## **Biosafety**

Biosafety in Microbiological and Biomedical Laboratories, 6th Edition (CDC, USA)

WHO Laboratory Biosafety Manual, Fourth Edition, And Associated Monographs

WHO safe management of wastes from healthcare facilities chapter 7 -8 page 77-99, 105-125)

## **Family medicine**

Oxford Handbook of General Practice, 5th Edition

## **Orthopedics**

Apley and Solomon's System of Orthopaedics and Trauma by Ashley Blom (Editor)

## **Rheumatology**

Davidson's Principles and Practice of Medicine

Clinical Medicine by Parveen J Kumar & Michael Clark

Hutchison's Clinical Methods by Michael Swash

## **Radiology**

Aids to Radiological Differential Diagnosis by Chapman S. and Nakielny R. 4th edition.

Elsevier Science Limited; 2003.

## **Forensic Medicine**

Knight's Forensic Pathology by Barnard Knight 3rd edition

G. Principles and Practice of Forensic Medicine by Prof. Nasib R. Awan, 2nd edition

Forensic DNA Typing – 2nd Edition, Author: John M. Butler

Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology by C.K. Parikh 6th Ed., CBS Publisher.

Gun Shot Wounds 2nd edition by V.J.Deimaio

Knight B. Simpson's Forensic Medicine.

Knight and Pekka. Principles of Forensic Medicine

### **Forensic Pathology**

Forensic pathology 2nd edition by V.J.Deimaio CRC press Boca Raton London New York

Washington DC

### **Toxicology**

Principles of clinical toxicology 3rd edition Thomas. Gossel CRC press Taylor and Francis group

### **Forensic Sciences**

Fundamentals of Forensic Science- 3rd Edition: Author: Max M Houck, Jay A. Siegel

TextBook of forensic medicine and toxicology Principles and Practice 5th edition by Krishan Vig

### **Biomedical ethics**

Principles of Biomedical ethics, 8th edition by Tom. L. Beauchamp, James F. Childress.

### **Evidence Based Medicine**

Databases for the latest articles/manuscripts

Clinical Practice Guidelines- local and international - (within last 3 years)

Books (Latest edition-within last 5 years)

### **Pediatrics**

Nelson's Book of Pediatric 22 edition Illustrated book of Pediatrics, Pervaiz Akbar textbook pediatrics medicine

### **Islamiyat**

Standard Islamiyat (compulsory) for B.A, BSc, MA, MSc, MBBS by Prof M Sharif Islahi.

Ilmi Islamiyat(compulsory) for BA, BSc & equivalent.



## About Avicenna Medical College

Avicenna Medical & Dental College is a purpose-built, fully equipped institution with experienced and excellence-driven faculty to train high-quality dental professionals in Pakistan.

Avicenna Medical & Dental College runs under the umbrella of Abdul Waheed Trust. Abdul Wahid Trust is a non-profit social welfare organization and registered under the Societies Act with the Registrar of Societies. The Trust is legalized through a Trust Deed that bears necessary rectifications. The Trust Deed is further supported by its Memorandum and Article of Association that authorizes the establishment and operation of the Medical College, the Dental College, the Nursing College, the Allied Health Sciences College, and other activities in the healthcare sector.

In 2009, Avicenna Medical & Dental College was recognized by the Pakistan Medical & Dental Council. With the advent of advanced tools and technology in every field of health science, medicine today has shot up to the greater end of the gamut with superior choice and promises in medical therapy in the very vicinity of the common man. AVMDC promises to be one such neighborhood.

### Infrastructure Resources

Sr .	Infrastructure Resources	Description
1.	Lecture Hall	Each year has a dedicated lecture hall, totaling five lecture halls for the five professional years. These halls are equipped with modern audiovisual aids to support effective teaching and learning.
2.	Tutorial Room	The college's tutorial rooms, each with a capacity of 30, are specifically designed to support small group discussions and interactive sessions. These rooms facilitate personalized instruction, enabling more engaged and effective learning through direct interaction between students and instructors.
3.	Lab	The college is equipped with state-of-the-art laboratories for practical and clinical work. Each lab is designed to support various disciplines, to facilitate hands-on learning.
4.	Library on campus	A huge library occupies a full floor and has 260 seats including study carrels and group-discussion tables. Latest reference books of Basic and Clinical Sciences along with national & international journals are available in the library.
5.	Digital Library	The digital library offers access to a vast collection of e-books, online journals, research databases, and other digital resources. It supports remote access and provides tools for academic research and learning.
6.	Learning Management System (LMS)	The LMS is a comprehensive online platform that supports course management, content delivery, student assessment, and communication. It provides tools for tracking progress, managing assignments, and facilitates ongoing academic activities.

6.	Phantom Labs	Specialized Phantom Labs are available for advanced simulation and practice in dental procedures. These labs provide high-fidelity models and simulators that help students refine their clinical skills in a controlled environment.
7.	Mess & Cafeteria	<p>The College has its own on-campus Mess which caters to 600 students. All food items including dairy, meat, and vegetables are sourced organically and bought in at the time of cooking, in order to ensure that students get freshly cooked meals at all times</p> <p>Students form the Mess committee which decides the mess menu in consultation with other students. The Mess offers fresh food to all residents three times a day. However, day scholars are also welcome to use the Mess facility at a reasonable cost.</p> <p>Two 50- inch LCD screens provide students an opportunity to get entertained during their meal times.</p>
8.	Gymnasium & Sports	<p>We recognize sports as a pivotal key to shape and maintain students' personality and good health. The College has indoor and outdoor sports facilities to help enhance the cognition and capacity to learn. There is a proper sports section for various games like basketball, football, volleyball, and cricket.</p> <p>The gym itself is fully equipped with modern machinery both for students and faculty.</p>
9.	IT Lab	The IT Lab is equipped with modern computers and software available for students who need access for academic purposes.
10.	Auditorium	The college has a spacious auditorium equipped with advanced audio-visual facilities. It is used for large-scale lectures, guest presentations, and academic conferences, providing a venue for students to engage with experts and participate in important educational events.
11.	Examination Halls	The college provides dedicated examination halls that are designed to accommodate a large number of students comfortably. These halls are equipped with necessary facilities to ensure a smooth and secure examination process, including proper seating arrangements, monitoring systems, and accessibility features.

## 7-Star Doctor Competencies (PMDC)

According to national regulatory authority PMDC, a Pakistani medical/dental graduate who has attained the status of a 'seven-star doctor' is expected to demonstrate a variety of attributes within each competency. These qualities/ generic competencies are considered essential and must be exhibited by the individual professionally and personally.

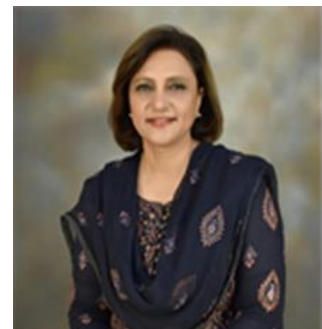
1. Skillful / Care Provider.
2. Knowledgeable / Decision Maker.
3. Community Health Promoter / Community Leader.
4. Critical Thinker / Communicator
5. Professional / Lifelong learner.
6. Scholar / Researcher
7. Leader/ Role Model / Manager

### Message from the Principal

As a Co-Founder and Co-Chairperson, I have been involved in planning, construction and accreditation of Avicenna Medical College by the Pakistan Medical and Dental Council (PM&DC) and its affiliation with the esteemed University of Health Sciences (UHS). It is a pleasure to see Avicenna Medical College develop, progress and achieve maximum academic excellence in a short period since its inception in 2009. The institution has lived up to its mission of training and producing medical graduates of international standards. Three batches have passed out as Doctors, who currently are serving in the country and abroad while several have opted for post-graduation and are on road to progress. We have achieved several milestones since 2009 including the recognition of our College for FCPS training by College of Physicians and Surgeons of Pakistan (CPSP), establishment of College of Nursing and Avicenna Dental College.

Principal

**Prof. Dr. Gulfreen Waheed**  
***MBBS, FCPS, MHPE, PhD Scholar - HPE***  
Avicenna Medical & Dental College



## Message from the Chairman

The Avicenna Medical & Dental College is a project of Abdul Waheed Trust which is a Non-profitable, Non-governmental, Non-political & Social organization, working for the welfare of Humanity and based on Community empowerment. Avicenna Medical College has its own 530 bedded Avicenna teaching Hospital (Not for Profit hospital) within the College Campus & 120 bedded Aadil Hospital, at 15 minutes' distance. Separate comfortable hostels for boys & girls are provided on the campus.

Our students benefit from the state of the art College Library with facilities of Internet & online Journals that remain open 15 hours a day, for our students & faculty members. I am particularly pleased with the hard work by the Faculty and Students in the achievement of historic 100% results for all the classes. It is a rare achievement and speaks of dedication of the Faculty and Staff. Our motto is Goodness prevails and we aim at producing Doctors' who are knowledgeable, competent in clinical skills and ethical values.

Avicenna Medical College & Hospital was founded to provide quality health care services to the deserving patients belonging to the rural areas near Avicenna Hospital as well as to provide quality medical education of international standard to our students. The Hospital provides all medical services and Lab diagnostics to the local population at minimal cost. So far by the grace of Allah Almighty the number of patients being treated and operated upon at our Hospital is increasing every day as there is no other public or charity hospital in the circumference of 20km. We have already established two Satellite Clinics in the periphery which are providing outdoor care while admission cases are brought to the Hospital in Hospital transport.

Following the success of our reputable Medical College and Hospital, we were able to successfully establish Avicenna Dental College which is recognized by the Pakistan medical & Dental Council & University of Health Sciences. To date, we have enrolled five batches in our dental college and we aim to achieve the same level of success for our dental students as our medical students.

Chairman  
**Abdul Waheed Sheikh**  
Avicenna Medical & Dental College





## **Avicenna Medical & Dental College**



### **Vision**

The vision of **Avicenna Medical & Dental College** is to become a college that thrives to achieve improvement in healthcare of masses through creative delivery of educational programs, innovative research, commitment to public service and community engagement in a environment that supports diversity, inclusion, creative thinking, social accountability, life-long learning and respect for all.

### **Mission**

The mission of **Avicenna Medical and Dental College** is to educate and produce competent, research oriented healthcare professionals with professional commitment and passion for life-long learning from a group of motivated students through quality education, research and service delivery for the improvement of health status of the general population.