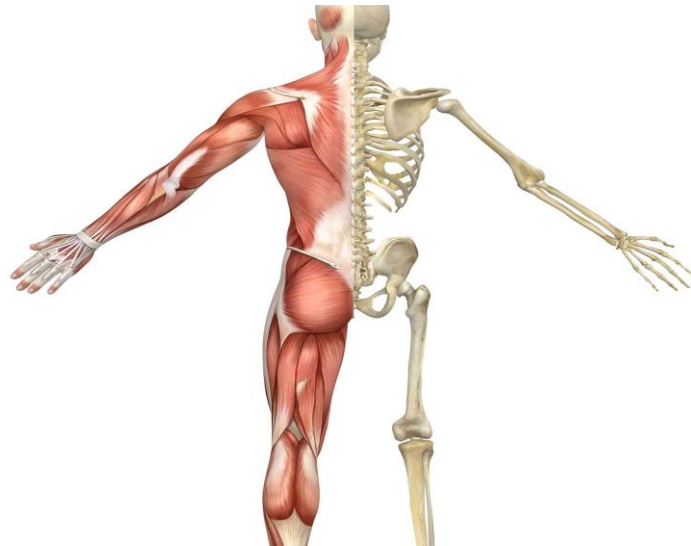


AVICENNA MEDICAL & DENTAL COLLEGE



STUDY GUIDE
2026

Musculoskeletal & Locomotion II
BLOCK 8 - MODULE 18



Program: MBBS
Year: 3rd Professional Year
Batch No: M-23
Session: 2025-2026

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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.

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.

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
	AUC	Area under the curve
	AV	Atrioventricular
B	B	Biochemistry
	BhS	Behavioral Sciences
	BHU	Basic Health Unit
	BSL	Biological Safety Level
C	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

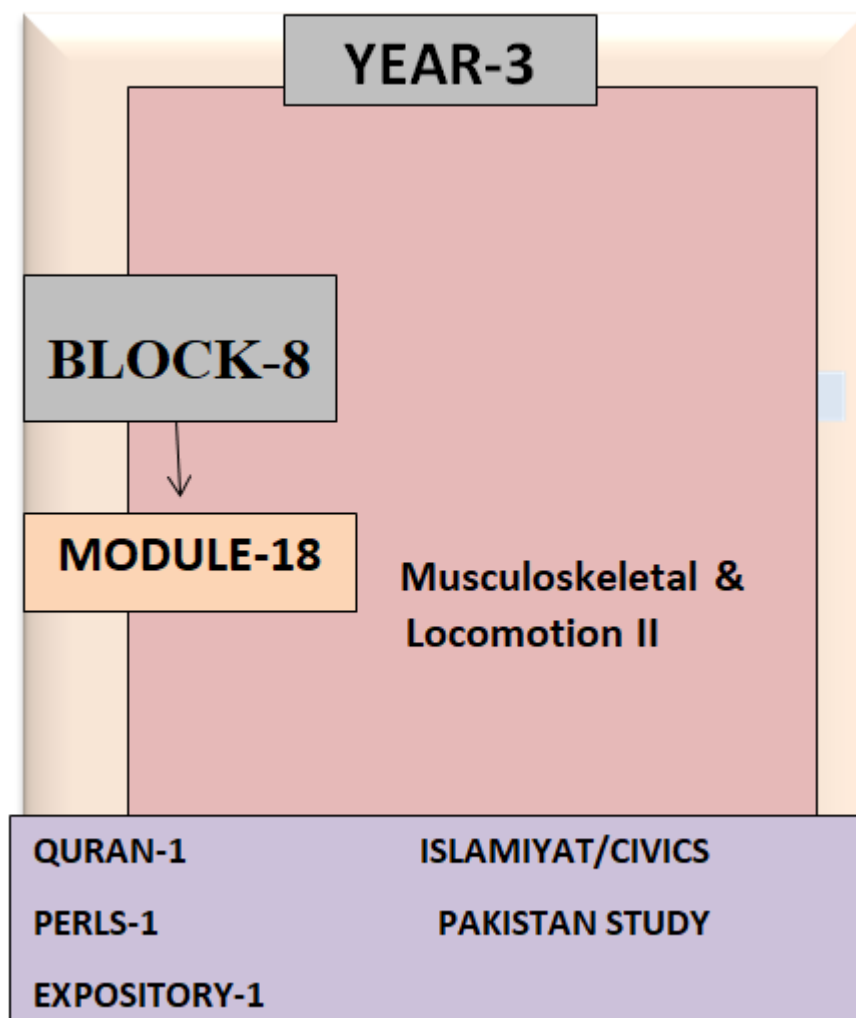
	CLED	cystine lactose electrolyte deficient
	CLL	chronic lymphocytic leukemia
	CM	Community Medicine
	CML	chronic myeloid leukemia
	CMV	cytomegalo virus
	CNS	Central Nervous System
	CO	Carbon monoxide
	CO2	Carbon dioxide
	CODIS	combined DNA index system
	COPD	Chronic obstructive pulmonary disease
	COVID-19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

	FM	Family Medicine
	For	Forensic Medicine
	FPIA	Fluorescent Polarization Immunoassay
	FS	Forensic Serology
	FSc	Forensic Science
	FVC	Forced Vital Capacity
G	GCS	Glasgow Coma Scale
	GFR	Glomerular Filtration Rate
	GIT	Gastrointestinal tract
	GL-MS	Gas Liquid Mass Spectrometry
	GLC	Gas Liquid Chromatography
	GLP	Guanosine Monophosphate
	GMP	Guanosine monophosphate
	GO	Gynecology and Obstetrics
	GP	General Practitioner
	GPE	General Physical Examination
	GTO	Golgi Tendon Organ
	Gynae & Obs	Gynecology and Obstetrics
H	H & E	Hematoxylin and eosin
	H. influenzae	Haemophilus influenzae
	H.pylori	Helicobacter pylori
	HAI	Healthcare Associated Infections
	HbC	Hemoglobin C
	HbS	Sickle Hemoglobin
	HbSC	Hemoglobin Sickle C Disease
	HCL	Hydrochloric Acid
	HCM	Hypertrophic Cardiomyopathy
	HHV	Human Herpesvirus
	HIT	Hematopoietic, Immunity and Transplant
	HIV	Human Immunodeficiency Virus
	HL	Hematopoietic & Lymphatic
	HLA	Human Leukocyte Antigen
	HMP	Hexose Monophosphate
	HNSS	Head & Neck and Special Senses
	HPLC	High Pressure Liquid Chromatography
I	ICF	Intra Cellular Fluid
	ID	Infectious Diseases
	IE	Infective Endocarditis
	IL	Interleukin
	ILD	Interstitial Lung Disease
	IN	Inflammation
	INR	International Normalized Ratio
	INSTIs	Integrase Strand Transfer Inhibitors
	IPV	Intrauterine Device
	IUD	Intrauterine device
	IUGR	Intra-Uterine Growth Restriction
J	JVP	Jugular Venous Pulse
L	L	Law

	LD50	Median Lethal Dose
	LDH	Lactate Dehydrogenase
	LSD	Lysergic acid diethylamide
M	M	Medicine
	MALT	Mucosa Associated Lymphoid Tissue
	MBBS	Bachelor of Medicine, Bachelor of Surgery
	MCH	Mean corpuscular hemoglobin
	MCHC	Mean Corpuscular Hemoglobin Concentration
	MCV	Mean Corpuscular Volume
	MHO2001	Mental Health Ordinance 2001
	MoA	Mechanism of action
	MRI	Mechanism of action
	MS	Musculoskeletal
	MSD	Musculoskeletal disorders
	MSDS	Minimum Service Delivery Standards
	MSK	Musculoskeletal
N	N	Neoplasia
	NEAA	Non-Essential Amino Acids
	NK cells	Natural Killer Cells
	NNRTI	Non-nucleoside Reverse Transcriptase Inhibitors
	NRTIs	Nucleoside Reverse Transcriptase Inhibitors
	NS	Neurosciences
O	NSAIDs	Non-steroidal Anti-Inflammatory Drugs
	O	Ophthalmology
	OA	Osteoarthritis
	OPC	Organophosphate
	OPV	Oral poliovirus vaccine
	Or	Orientation
P	Orth	Orthopaedic
	P	Physiology
	P.jiroveci	Pneumocystis jiroveci
	Pa	Pathology
	PAD	Pathology
	PAF	Platelet activating factor
	PBL	Problem Based Learning
	PCH	Psychiatry
	PCR	Polymerase Chain Reaction
	PDA	Patent Ductus Arteriosus
	PDGF	Platelet derived growth factor
	Pe	Pediatrics
	PEM	Protein Energy Malnutrition
	PERLs	Professionalism, Ethics, Research, Leadership
	PET	Positron Emission Tomography
	Ph	Pharmacology
	Ph	Pharmacology
	PI	Personal Identity
	PID	Pelvic inflammatory disease

	PIs	Protease inhibitors
	PMC	Pakistan Medical Commission
	PMDC	Pakistan Medical and Dental Council
	PMI	Post-Mortem Interval
	PNS	Peripheral Nervous System
	PPD	Paraphenylenediamine
	PPE	Personal Protective Equipment
	Psy	Psychiatry
	PT	Prothrombin Time
	PVC	Premature Ventricular Contraction
	PVD	Peripheral Vascular Diseases
Q	QALY	Quality-Adjusted Life Year
	QI	Quran and Islamiyat
R	R	Renal
	Ra	Radiology
	RA	Radiology
	RBCs	Red Blood cells
	RCM	Restrictive Cardiomyopathy
	RDA	Recommended Dietary Allowance
	Re	Respiratory
	RF	Rheumatoid factor
	RFLP	Restriction Fragment Length Polymorphism
	Rh	Rheumatology
	RHC	Rural Health Center
	RIA	Radioimmunoassay
	RMP	Resting Membrane Potential
	RNA	Ribonucleic Acid
	RTA	Road Traffic Accident
S	S	Surgery
	S.pneumonia	Streptococcus pneumoniae
	SA	Sinoatrial
	SCC	Squamous-cell carcinoma
	Se	Sexology
	Sec	Section
	SIDS	Sudden Infant Death Syndrome
	SLE	Systemic Lupus Erythematosus
	SOP	Standard Operating Procedure
T	TB	Tuberculosis
	TBI	Traumatic Brain Injury
	TCA	Tricarboxylic acid cycle
	TCBS	Thiosulphate Citrate Bile salts Sucrose
	TD50	Median Toxic Dose
	TGA	Transposition of the Great Arteries
	Th	Thanatology
	TLC	Thin Layer Chromatography
	TNF	Tumor Necrotic Factor
	TNM	Tumor Necrotic Factor
	TOF	Tetralogy of Fallot

	Tox	Toxicology
	Tr	Traumatology
	TSI	Triple Sugar Iron
U	USG	Ultrasonography
	UTI	Urinary Tract Infections
	UV	Ultraviolet
V	VAP	Ventilator-Associated Pneumonia
	Vd	Volume of Distribution
	VEGF	Vascular Endothelial Growth Factor
	VSD	ventricular septal defect
W	W. bancroft	Wuchereria bancroft
	WBCs	White Blood Cells
	WHO	World Health Organization
Z	ZN Staining	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.

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.

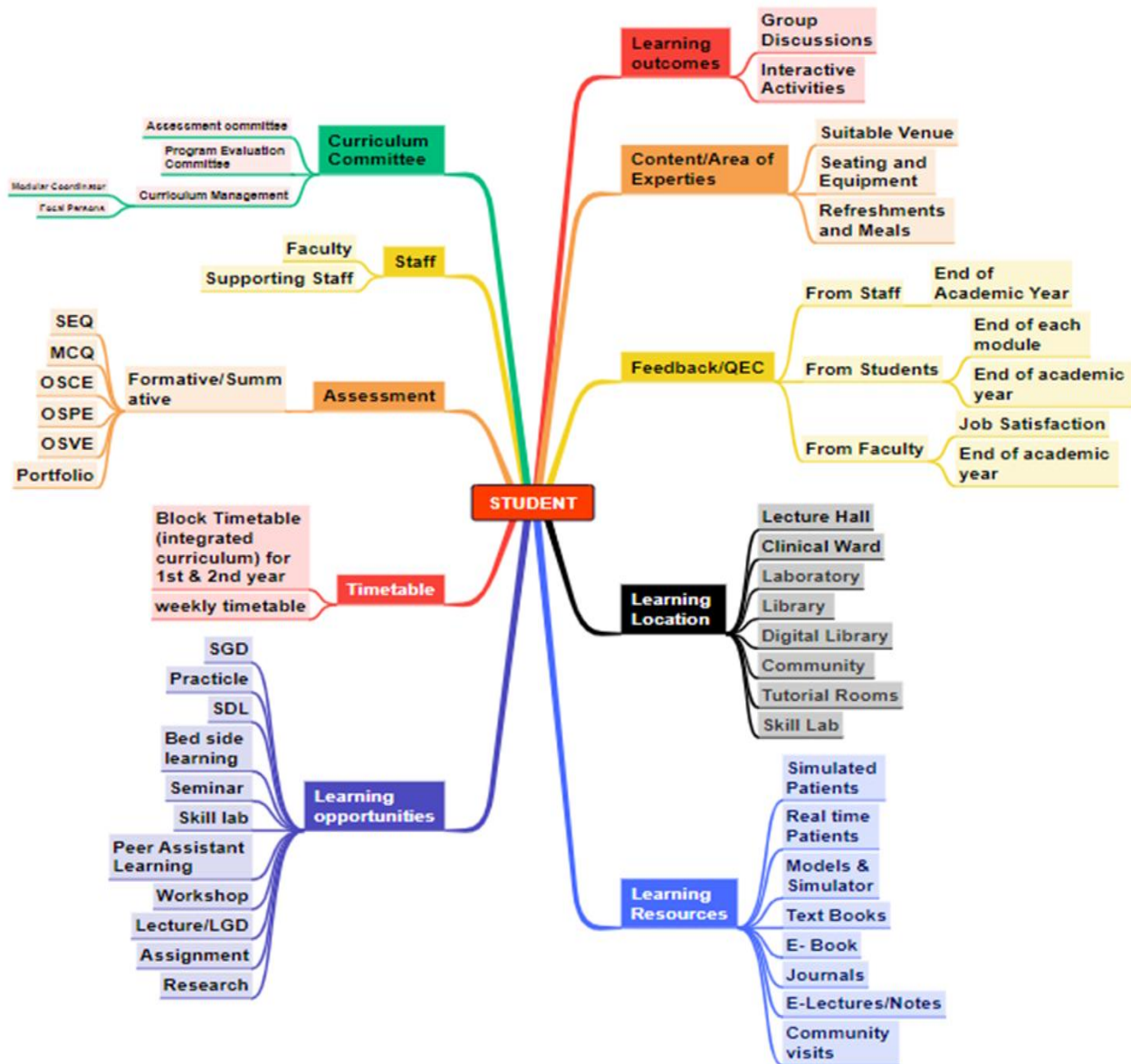
- Skillful / Care Provider.
- Knowledgeable / Decision Maker.
- Community Health Promoter / Community Leader.
- Critical Thinker / Communicator
- Professional / Lifelong learner.
- Scholar / Researcher
- Leader/ Role Model / Manager

- Explain the pathology and underlying mechanisms of common musculoskeletal disorders and injuries, including septic arthritis, osteomyelitis, fractures, and degenerative conditions.
- Identify key features of various musculoskeletal disorders, including their clinical presentations, epidemiology, and impact on community health.
- Perform thorough musculoskeletal examinations to assess joint mobility, strength, and functional capabilities.
- Interpret relevant imaging studies (e.g., X-rays, MRI, CT scans) to aid in the diagnosis and management of musculoskeletal conditions.
- Apply appropriate first aid measures for common musculoskeletal injuries, including immobilization techniques and pain management strategies.
- Integrate knowledge from orthopedics, surgical traumatology, forensic traumatology, and rheumatology to develop comprehensive management plans for patients with musculoskeletal conditions.
- Collaborate effectively with healthcare professionals from diverse specialties, including pathology, pharmacology, community medicine, behavioral sciences, and radiology, to enhance patient care.
- Critically evaluate and apply current evidence-based guidelines and research findings to inform clinical decision-making in the management of musculoskeletal disorders.
- Formulate treatment plans that incorporate pharmacological and non-pharmacological interventions based on best practices and individual patient needs.
- Demonstrate empathy and effective communication skills when interacting with patients suffering from musculoskeletal disorders, ensuring a patient-centered approach to care.
- Educate patients about their conditions, treatment options, and the importance of adherence to management plans for optimal outcomes.
- Recognize the ethical considerations and challenges in the management of musculoskeletal disorders, including issues related to informed consent, patient autonomy, and resource allocation.
- Exhibit professionalism in all interactions with patients, families, and healthcare team members, promoting a culture of respect and trust.

Name	Designation	Department
Prof. Dr. Gulfreen Waheed	Principal & Director	Medical Education
Dr. Saba Iqbal	Associate Director	Medical Education
Dr Hussain Raza	Assistant Professor	Medical Education
Dr. Javaid Shabkhez Rab	Coordinator	Medical Education
Dr. Salar Arsalan	Demonstrator	Medical Education
Dr. Huma Fatima	Demonstrator	Medical Education
Dr. Ijlal Zehra	Head	Assessment Cell
Prof. Dr. Saeed Afzal	Head	Pathology
Dr. MAJID RAUF AHMAD	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. Hassan	Focal Person	General Surgery
Prof. Dr. Muzammil	Head	Medicine Unit-1
Prof. Dr. Waheed Ahmed	Head	Medicine Unit-2
Dr. Imran	Focal Person	General Medicine
Dr. Usman	Focal Person	Psychiatry
Dr. Sadia Malik	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:



ACADEMIC CALENDER:

Avicenna Medical & Dental College Calendar 2025-2026 3rd Year MBBS																											
January 2026								February 2026								March 2026								SESSION START: 2nd March 2026			
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat	Gazetted Holidays				
				1	2	3		1	2	3	4	5	6	7	Week-01	1	2	3	4	5	6	7	i- Kashmir Holiday - 5th Feb 2026				
4	5	6	7	8	9	10		8	9	10	11	12	13	14	Week-02	8	9	10	11	12	13	14	ii- Eid-ul-Fitr- 19th March 2026				
11	12	13	14	15	16	17		15	16	17	18	19	20	21	Spring vacations	15	16	17	18	19	20	21	iii- Pakistan Day -23rd March 2026				
18	19	20	21	22	23	24		22	23	24	25	26	27	28	Week-03	22	23	24	25	26	27	28	iv- Labor Holiday- 1st May 2026				
25	26	27	28	29	30	31									Week-04	29	30	31 M-13					v- Eid- Ul- Adha- 27th May 2026				
																							vi- Youm-e-Takbeer Holiday- 30th May 2026				
																							vii- Ashura- 25th & 26th June 2026				
April 2026								May 2026								June 2026											
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat					
			1	2	3	4	Week-08						1	2	Week-12		1	2	3	4	5	6	viii- Independence Day- 14th Aug 2026				
Week-04										5 ALLIED TEST M-14	6	7	8	9	Week-13	7	8	9 M-15	10	11	12	13	ix- Milad un Nabi- 25th Aug 2026				
Week-05	5	6	7	8	9	10	Week-09	3	4						Week-14	14	15	16	17	18	19	20	x- Qaid-e-Azam Day-Christmas- 25th Dec 2026				
Week-06	12	13	14	15	16	17	Week-10	10	11	12	13	14	15	16	Week-15	21	22	23	24	25 M-16	26 M-17	27	Vacations				
Week-07	19	20	21 M-13	22	23	24	Week-11	17	18 B:7 Written	19 B:7 Ospe/Viva	20	21	22	23	Week-16	28	29	30					Spring Vacations - 16th March - 23rd March, 2026				
Week-08	26	27	28	29	30		Eid week	24	25	26	27	28	29	30									Summer Vacations - 11th July- 30th Aug 2026				
								31															Winter Vacations - 19th Dec 2026				
July 2026								August 2026								September 2026								Events			
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat					
			1	2	3	4								1	Week-21			1	2	3	4	5	Happiness World TB Day				
Week-16																		1	2	3	4	5	World Autism Awareness Day				
Week-17	5	6	7 M-17	8	9	10	Week-18	2	3	4	5	6	7	8	Week-22	6	7	8	9	10	11	12	World Health Day				
Summer vacations	12	13	14	15	16	17	Week-19	9	10	11	12	13	14 M-18	15	Week-23	13	14	15 M-19	16	17	18	19	White Coat Ceremony				
Summer vacations	19	20	21	22	23	24	Week-20	16	17	18	19	20	21	22	Week-24	20	21 B:8 Written	22 B:8 Ospe/Viva	23	24	25	26	Music Fest - 2026				
Summer vacations	26	27	28	29	30	31	Week-21	23	24	25 M-20	26	27	28	29	Week-25	27	28	29	30				Spring Fest				
								31															World Hand Hygiene Day				
																							International Nursing Day				
																							World Hypertension Day				
																							Debates & MUN				
																							Class Trips				
																							World Environment Day				
																							Fun Fair				
																							International Self-Care Day				
Week-25				1	2	3	Week-30	1	2	3	4	5	6	7	Week-34			1	2	3	4	5	Independence Day				
Week-26	4	5	6	7	8	9	Week-31	8	9	10 M-21	11	12	13	14	Week-35	6	7	8	9	10	11	12	Oral & Nasal Competition				
Week-27	11	12	13 M-22	14	15	16	Week-32	15	16	17	18	19	20	21	Week-36	13	14	15	16	17 M-23	18	19	Blood Cancer Awareness Day				
Week-28	18	19	20	21	22	23	Week-33	22	23	24	25	26	27	28	Week-37	20	21 B:9 Written	22 B:9 Ospe/Viva	23	24	25 M-24	26	World First Aid Day				
Week-29	25	26	27	28	29	30	Week-34	29	30						Winter vacation	27	28	29	30	31			World Patient Safety Day				
																							Sports Fest - 26				
																							World Mental Health Day				
																							Breast Cancer Awareness				
																							Talent Hunt & Drums				
																							Block Exam				
																							a-Block-7 Exam- 13th & 14th May 2026				
																							b-Block-8 Exam- 16th & 17th September 2026				
																							c-Block-9 Exam- 14th & 15th December 2026				
																							Internal Assessment Exam				
																							IAT-1 16th December 2026				

Timetable

AVICENNA MEDICAL & DENTAL COLLEGE

Rectangular Snip

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE Week 17		M-23 3rd Year MBBS	SESSION 2025-2026						BLOCK 8
DATE	DAY								MODULE -18
6-Jul	MON	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30	12.30-1.30	1.30-3.30	
		LECTURE MEDICINE	LECTURE COMMUNITY MEDICINE	LECTURE PHARMACOLOGY	Break	LECTURE PATHOLOGY	LECTURE PERLS (Community Medicine)	Clinical Rotation-CFRC	
7-Jul	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	
		Module 17 Exam (Written)		Break	Module 17 Exam (OSPE/VIVA)			Clinical Rotation-CFRC	
8-Jul	WED	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30	12.30-1.30	1.30-3.30	
		LECTURE ORTHOPEDICS	LECTURE PATHOLOGY	LECTURE MEDICINE	Break	LECTURE SURGERY	TUTORIAL	Clinical Rotation-CFRC	
9-Jul	THU	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-2.30	2.30-3.30
		LECTURE FOR.MEDICINE	LECTURE SURGERY	LECTURE PHARMACOLOGY		LECTURE ORTHOPEDICS	LECTURE MEDICINE	TUTORIAL	TUTORIAL
10-Jul	FRI	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00	2.00-3.30	
		LECTURE PATHOLOGY	LECTURE FOR.MEDICINE	LECTURE COMMUNITY MEDICINE	LECTURE ORTHOPEDICS	LECTURE SURGERY	JUMMA BREAK	LECTURE PERLS	

AVICENNA MEDICAL & DENTAL COLLEGE

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TIME TABLE Week 18		M-23 3rd Year MBBS	SESSION 2025-2026						BLOCK 8			
DATE	DAY								MODULE -18			
10-Aug	MON	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30		12.30-1.30		1:30-3.30		
		LECTURE SURGERY	LECTURE ORTHOPEDICS	LECTURE PATHOLOGY	Break	TUTORIAL		PRACTICAL		Clinical Rotation-CFRC		
11-Aug	TUE	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30		1:30-3.30		
		LECTURE ORTHOPEDICS	LECTURE SURGERY	LECTURE PATHOLOGY		TUTORIAL		PRACTICAL		Clinical Rotation-CFRC		
12-Aug	WED	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30		1:30-3.30		
		LECTURE PATHOLOGY	LECTURE PHARMACOLOGY	LECTURE SURGERY		TUTORIAL		PRACTICAL		Clinical Rotation-CFRC		
13-Aug	THU	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30		1.30-2.30	2.30-3.30	
		LECTURE MEDICINE	LECTURE ORTHOPEDICS	LECTURE PATHOLOGY		LECTURE ORTHOPEDICS		LECTURE BEH.SCIENCES		LECTURE PERLS	EW	
14-Aug	FRI	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00		2.00-3.30			
		Independence day										

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TIME TABLE Week 19		M-23 3rd Year MBBS	SESSION 2025-2026						BLOCK 8
DATE	DAY								MODULE -18
17-Aug	MON	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30		12.30-1.30	1:30-3.30
		LECTURE MEDICINE	LECTURE ORTHOPEDECS	LECTURE PATHOLOGY	Break	TUTORIAL		PRACTICAL	Clinical Rotation-CFRC
18-Aug	TUE	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30	1:30-3.30
		LECTURE PATHOLOGY	LECTURE MEDICINE	LECTURE ORTHOPEDECS		TUTORIAL		PRACTICAL	Clinical Rotation-CFRC
19-Aug	WED	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30	1:30-3.30
		LECTURE ORTHOPEDECS	LECTURE PATHOLOGY	LECTURE MEDICINE		LECTURE ORTHOPEDECS		TUTORIAL	Clinical Rotation-CFRC
20-Aug	THU	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30		12.30-1.30	1.30-2.30 2.30-3.30
		LECTURE FOR.MEDICINE	LECTURE ORTHOPEDECS	LECTURE PATHOLOGY		LECTURE MEDICINE		LECTURE ORTHOPEDECS	E.W PRACTICAL
21-Aug	FRI	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00		2.00-3.30
		LECTURE PATHOLOGY	LECTURE FOR.MEDICINE	LECTURE ORTHOPEDECS	LECTURE PATHOLOGY	LECTURE MEDICINE	JUMMA BREAK		LECTURE PERLS

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AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE Week 20		M-23 3rd Year MBBS	SESSION 2025-2026						BLOCK 8	
DATE	DAY		MODULE -18							
24-Aug	MON	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30		12.30-1.30	1:30-3.30	
		LECTURE ORTHOPEDECS	LECTURE PATHOLOGY	LECTURE MEDICINE	Break	TUTORIAL		LECTURE PERLS	Clinical Rotation-CFRC	
25-Aug	TUE	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30		12.30-1.30	1:30-3.30	
		Milad-un-Nabi								
26-Aug	WED	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30		12.30-1.30	1:30-3.30	
		LECTURE PATHOLOGY	LECTURE MEDICINE	LECTURE ORTHOPEDECS	Break	TUTORIAL		PRACTICAL	Clinical Rotation-CFRC	
27-Aug	THU	8.00-9.00	9.00-10.00	10.00-11.00		Break	11.30-12.30		12.30-1.30	1.30-2.30
		LECTURE FOR.MEDICINE	LECTURE ORTHOPEDECS	LECTURE PHARMACOLOGY	LECTURE PATHOLOGY		TUTORIAL	PRACTICAL	PRACTICAL	
28-Aug	FRI	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00		2.00-3.30	
		LECTURE MEDICINE	LECTURE FOR.MEDICINE	LECTURE PATHOLOGY	LECTURE ORTHOPEDECS	LECTURE BEH.SCIENCES	JUMMA BREAK		LECTURE PERLS	

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TIME TABLE Week 21		M-23 3rd Year MBBS	SESSION 2025-2026						BLOCK 8
DATE	DAY								MODULE -18
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30	12.30-1.30	1.30-3.30	
31-Aug	MON	LECTURE PATHOLOGY	LECTURE MEDICINE	LECTURE PATHOLOGY	Break	TUTORIAL	PRACTICAL	Clinical Rotation-CFRC	
		8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-3.30	
1-Sep	TUE	LECTURE ORTHOPEDECS	LECTURE PATHOLOGY	LECTURE FOR.MEDICINE		TUTORIAL	PRACTICAL	Clinical Rotation-CFRC	
		8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-3.30	
2-Sep	WED	LECTURE MEDICINE	LECTURE PATHOLOGY	LECTURE PERLS		LECTURE PATHOLOGY	EW	Clinical Rotation-CFRC	
		8.00-9.00	9.00-10.00	10.00-11.00	Break	11.30-12.30	12.30-1.30	1.30-2.30	2.30-3.30
3-Sep	THU	LECTURE FOR.MEDICINE	LECTURE PATHOLOGY	LECTURE PHARMACOLOGY		LECTURE PATHOLOGY	LECTURE PHARMACOLOGY	TUTORIAL	PRACTICAL
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00	2.00-3.30	
4-Sep	FRI	LECTURE PATHOLOGY	LECTURE FOR.MEDICINE	LECTURE PERLS	LECTURE PATHOLOGY	EW	JUMMA BREAK	LECTURE PERLS	

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TIME TABLE Week 22		M-23 3rd Year MBBS	SESSION 2025-2026					BLOCK 8	
DATE	DAY							MODULE -18	
7-Sep	MON	8.00-9.00	9.00-10.00	10.00-11.00	11.00-11.30	11.30-12.30	12.30-1.30	1.30-3.30	
		MEDICINE AND ALLIED (GYNAE, PAEDS) TEST		LECTURE PATHOLOGY	Break	TUTORIAL	PRACTICAL	Clinical Rotation-CFRC	
8-Sep	TUE	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-3.30	
		LECTURE PATHOLOGY	LECTURE PERLS	LECTURE PATHOLOGY		TUTORIAL	PRACTICAL	Clinical Rotation-CFRC	
9-Sep	WED	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-3.30	
		ORTHOPEDICS/ SURGERY/ Patient Safety TEST		LECTURE PATHOLOGY		LECTURE FOR.MEDICINE	LECTURE PATHOLOGY	Clinical Rotation-CFRC	
10-Sep	THU	8.00-9.00	9.00-10.00	10.00-11.00		11.30-12.30	12.30-1.30	1.30-2.30	2.30-3.30
		LECTURE PATHOLOGY	LECTURE FOR.MEDICINE	LECTURE PATHOLOGY		COMMUNITY MEDICINE TEST		TUTORIAL	PRACTICAL
11-Sep	FRI	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-1.00	1.00-2.00	2.00-3.30	
		PATHOLOGY TEST		LECTURE PATHOLOGY	EW	LECTURE PATHOLOGY	JUMMA BREAK	LECTURE PERLS	

Allocation of Hours

AVICENNA MEDICAL COLLEGE, LAHORE																																											
3RD YEAR MBBS (2025-26)																																											
	PATHOLOGY			PHARMACOLOGY			F.M			COMMUNITY MEDICINE				Surgery		Medicine		Cardio		Pulmo		ORTHO		Radiology		Paeds		Gynae		FAMILY MED	ioche	Physic	B.S	PERL	sitory Writin	Asses ment	Total						
Wk #	Lec	Prac	Tut	Lec	Prac	Tut	Lec	Prac	Tut	Lec	Tut	Field	Prac	Lec	CR	Lec	CR	Lec	CR	Lec	CR	Lec	CR	Lec	CR	Lec	CR	Lec	CR														
BLOCK-7	1	4	1	1	7	1	2	2	1					2	2	2	2										1							1	2.5			34.5					
	2	4	1	1	7	1	2	2	1					2	2	2	2										1							1	3.5			34.5					
	3	5	1	1	6	1	2	2	1					1	2		2																	2.5				27.5					
	4	4	1	1	6	1	2	2	1						2		3																1	1	1	1.5	1	5		34.5			
	5	6	1	1	10	1	2	2	1						3		3																1	1	1	1.5			34.5				
	6	5	1	1	11	1	2	2	1						3		3																		2.5		2		34.5				
	7	4	1	1	6	1	2	2	1					1	2	1	3																	1			1.5	1	5		34.5		
	8	3	1	1	6	1	2	2	1						1	3	1	3																1				2		28			
	9	6	1	1	8	1	2	2	1						1	2	1	2																	2.5	1	2		34.5				
	10	3	1	1	4	1	2	2	1						1	3	2	3																	1	1.5	1	7		34.5			
BLOCK-8	11	5	3.7		3			2	1.8				1			1																		1					14		34.5		
	12	6	1.8		6			2	3.7					1	2	3	2																	1						34.5			
	13	5	1.2		4	1.1		2	1.2				2	1	2	2	2																			1		1	5		34.5		
	14	8	1	2	5	1		2	1				2	1		1	2	1	2																		1.5				34.5		
	15	3	2	2	1			1	1				1	1		1	2	1	2																					21			
	16	8	1	2	6			2	2				2	1		2	1	2																			3.5				34.5		
	17	3		2	2		1	2						2		3	2	3	2																	2.5		5		34.5			
	18	4	1	2	1	1			1	1					3	2	1	2																			1	1	1		28		
	19	6	1	2		1	1	2	1							2	5	2																			1.5	1			34.5		
	20	4	1	2	1	1			2	1	1					3	2																			1		2.5			27.5		
BLOCK-9	21	9	2	2	2			3	1	1					2	2	2																				3.5	2			34.5		
	22	9	2	2				2	1	1					2		2																				2.5	1	8		34.5		
	23	6	2	2	1			2	1	1	1		1		2		2																				2.5		9		34.5		
	24	2	1.8		3	1.8		1	1.9					1		2	1	2	1																					14		34.5	
	25	4	1	1	3	1	1	1	1	1	2				3	2	3	2	5	2																		1.5			34.5		
	26	3	1	1	4	1	1	2	1	1	1				1	2	4	2	5	2																		2.5			34.5		
	27	2	1		2	1		1	1						4	2	1	2	2	2																1			5		28		
	28	4	1		4	1	1	2	1	1	2	1			4	2		2			5	2															1.5				34.5		
	29	5	1	1	4	1	1	2	1					1	1		2			5	3																1.5				34.5		
	30	4	1	1	4			1	2	2			5	1			2				6	3															1.5				34.5		
	31	4						2					5			2		2			2	2												3				1.5	1	5		34.5	
	32	2	1.1					1	3	2.4	1	5	1	5		2		2		1		1														5			2			34.5	
	33		1					3	2		6		5	5		2		2		1		1														5				1.5			34.5
	34	1		1				4	2.4	1	5	1	5			2		2		1		1														1				6		34.5	
	35	2	1.1		1			3	2.4		2		5		1	2	1	2		1	1	1														3				6		34.5	
	36	1	1					1	4	1	1	2	10		1		1	1																		1		1.5	5		34.5		
	37																																								14		14
	154	41.7	35		128	24	28	71	48.8	11		55	10	35	5	35	65	44	74	14	11	19	15	20	18	6	5	2	4	2	4	18	7	2	8	55.5	15	119	1209				
	230.7			180			130.8			105				100		118		25		34		38		11		6		6		18	7	2	8	55.5	15	119							
	PATHOLOGY			PHARMACOLOGY			F.M			COMMUNITY MEDICINE				Surgery		Medicine		Cardio		Pulmo		ORTHO		Radiology		Paeds		Gynae		FAMILY MED	ioche	Physic	B.S	PERL	Expo sitory Writin g	Asses ment							

Modular Outcomes

Module Name **Musculoskeletal & locomotion II**

Block 8 **Module 18**

- Explain the pathology and underlying mechanisms of common musculoskeletal disorders and injuries, including septic arthritis, osteomyelitis, fractures, and degenerative conditions.
- Identify key features of various musculoskeletal disorders, including their clinical presentations, epidemiology, and impact on community health.
- Perform thorough musculoskeletal examinations to assess joint mobility, strength, and functional capabilities.
- Interpret relevant imaging studies (e.g., X-rays, MRI, CT scans) to aid in the diagnosis and management of musculoskeletal conditions.
- Apply appropriate first aid measures for common musculoskeletal injuries, including immobilization techniques and pain management strategies.
- Integrate knowledge from orthopedics, surgical traumatology, forensic traumatology, and rheumatology to develop comprehensive management plans for patients with musculoskeletal conditions.
- Collaborate effectively with healthcare professionals from diverse specialties, including pathology, pharmacology, community medicine, behavioral sciences, and radiology, to enhance patient care.
- Critically evaluate and apply current evidence-based guidelines and research findings to inform clinical decision-making in the management of musculoskeletal disorders.
- Formulate treatment plans that incorporate pharmacological and non-pharmacological interventions based on best practices and individual patient needs.
- Demonstrate empathy and effective communication skills when interacting with patients suffering from musculoskeletal disorders, ensuring a patient-centered approach to care.
- Educate patients about their conditions, treatment options, and the importance of adherence to management plans for optimal outcomes.
- Recognize the ethical considerations and challenges in the management of musculoskeletal disorders, including issues related to informed consent, patient autonomy, and resource allocation.
- Exhibit professionalism in all interactions with patients, families, and healthcare team members, promoting a culture of respect and trust.

Learning Objectives

RHEUMATOLOGY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 17	
		INTEGRATING DISCIPLINE	TOPIC
MS2-Rh-001	Explain the immunopathogenesis and underlying mechanisms leading to Rheumatoid Arthritis (RA). Diagnose RA based on characteristic clinical features. Differentiate RA from other causes of polyarthritis based on clinical and laboratory findings. Interpret relevant investigations. Discuss the diagnostic criteria for confirming RA. Outline the management plan.	Rheumatology/ Medicine	Rheumatoid Arthritis

MS2- Rh- 002	Identify risk factors for contributing to the development and progression of osteoarthritis. Describe the clinical features and typical pattern of joint involvement in OA. Differentiate OA from other types of arthritis based on clinical presentation and investigation. Interpret relevant diagnostic investigations. Outline management plan. Identify the complications and functional limitations associated with OA.	Rheumatology/ Medicine	Osteoarthritis (OA)
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MS2- Rh- 003	Define crystal arthritis. Differentiate between gout and pseudogout. Describe the pathophysiology of monosodium urate and calcium pyrophosphate crystal deposition in joints. Identify risk factors and precipitating causes associated with gout and pseudogout. Describe clinical features and stages of gout. Interpret relevant laboratory and imaging findings. Discuss management strategies. Identify potential complications.	Rheumatology/ Medicine	Crystal Arthritis (Gout/Pseudo gout)
	Define systemic inflammatory vasculitis and classify its major types.		

**MS2-
Rh-
004**

Describe the pathophysiological mechanisms underlying systemic vasculitis.

Identify common etiological factors and associations of systemic vasculitis.

Identify the characteristic clinical features and organ involvement in different types of vasculitis.

Discuss the diagnostic approach including relevant laboratory tests, imaging, and biopsy findings.

Differentiate between major types of vasculitis on the basis of clinical and diagnostic features.

Outline principles of management including pharmacological and supportive therapies.

Discuss potential complications and long-term

**Rheumatology/
Medicine,
Integrate with
Pathology**

Systemic Inflammatory Vasculitis

	outcomes of systemic inflammatory vasculitis.		
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MS2- Rh- 005	Describe the genetic predisposition and immunopathogenesis of ankylosing spondylitis. Identify the cardinal clinical features of ankylosing spondylitis. Interpret the diagnostic criteria and characteristic radiological findings. Differentiate ankylosing spondylitis from mechanical back pain and other spondyloarthropathies. Outline treatment principles including pharmacological, physical therapy, and lifestyle modifications. Describe its complications, disability risks, and long-term prognosis.	Rheumatology/ Medicine	Ankylosing spondylitis.
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MS2- Rh- 006	Define SLE and describe its immunopathogenesis. List common risk factors and triggers (genetic, environmental, hormonal). Identify the clinical manifestations involving skin, joints, kidneys, hematological and nervous systems. Describe diagnostic criteria and relevant laboratory investigations. Outline the principles of management including pharmacological and supportive measures.	Rheumatology/ Medicine	Systemic Lupus Erythematosus (SLE)
MS2- Rh- 007	Define systemic sclerosis and classify its major types. Describe the pathophysiological changes in it. Identify the key clinical features including skin thickening, Raynaud's phenomenon, and internal organ involvement.	Rheumatology/ Medicine	Systemic sclerosis

	Identify diagnostic tests and autoantibodies associated with systemic sclerosis. Outline the management strategies including symptomatic treatment and prevention of complications.		
MS2- Rh- 008	Define polymyositis and dermatomyositis, highlighting their autoimmune basis. Identify characteristic clinical features. Discuss laboratory and diagnostic investigations. Outline the management approach including immunosuppressive therapy and physiotherapy.	Rheumatology/ Medicine	Polymyositis and dermatomyositis

MS2- Rh- 009	Define Sjögren's syndrome and differentiate between primary and secondary forms. Describe the pathophysiology involving lymphocytic infiltration of exocrine glands. Recognize typical clinical features including xerostomia, keratoconjunctivitis sicca, and systemic manifestations. Discuss relevant diagnostic investigations (Schirmer's test, salivary gland biopsy, autoantibodies). Outline management strategies including symptomatic relief and immunosuppression when indicated.	Rheumatology/ Medicine	Sjögren's syndrome
ORTHOPEDICS & TRAUMA			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 14+12	
		INTEGRATING DISCIPLINE	TOPIC

MS2- Ort h- 001	Explain the classification of fractures using the AO system. Describe principles of fracture healing. Differentiate between complete and incomplete fractures.	Orthopedics, Radiology	Fracture Classification and Healing
MS2- Ort h- 002	Discuss pediatric fractures and their management. Explain Salter-Harris classification for growth plate injuries.	Orthopedics	Pediatric Fractures
MS2- Ort h- 003	Define osteoporotic fractures and their clinical features. Identify common sites of osteoporotic fractures. Discuss risk factors for osteoporosis.	Orthopedics	Osteoporotic Fractures

MS2- Ort h- 004	Define pathological fractures and differentiate from traumatic fractures. Identify causes of pathological fractures. Describe diagnostic approaches for pathological fractures. Explain management options for pathological fractures.	Orthopedics	Pathological Fractures
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MS2- Orth - 005	Classify sports injuries and their management. Describe common sports injuries in upper and lower limbs. Discuss pathophysiology of muscle strains and ligament sprains. Explain biomechanics of gait and malalignment injuries. Outline injury prevention strategies in sports. Analyze rehabilitation processes for sports injuries. Discuss use of assistive devices in rehabilitation. Explain psychological impact of sports injuries. Describe nutritional roles in recovery from sports injuries. Outline surgical intervention in severe sports injuries.	Orthopedics	Sports Injuries
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MS2- Orth - 006	Define achondroplasia as the most common skeletal dysplasia and describe its effect on bone growth. Identify the characteristic skeletal features. Identify musculoskeletal complications due to achondroplasia. Interpret characteristic radiographic findings relevant to diagnosis and follow-up. Outline management principles. Discuss the role of surgical and non-surgical interventions in improving function and quality of life.	Orthopedics	Achondroplasi a
MS2- Orth - 007	Define scoliosis and its types. Identify clinical features and screening methods for scoliosis. Discuss treatment options for scoliosis. Describe multidisciplinary approach in managing scoliosis.	Orthopedics	Scoliosis

MS2- Orth - 008	Define osteogenesis imperfecta and describe its genetic basis and abnormal collagen formation. Identify the key skeletal manifestations. Identify associated musculoskeletal complication. Interpret characteristic radiological features of OI used for diagnosis and monitoring. Discuss the principles of management.	Orthopedics	Osteogenesis Imperfecta
MS2- Orth - 009	Define Marfan syndrome and describe its genetic basis. Identify the characteristic skeletal features. Identify orthopedic complications. Interpret relevant clinical and radiological findings used in diagnosing skeletal involvement. Outline principles of management.	Orthopedics	Marfan syndrome

MS2- Orth - 010	Define septic arthritis and identify its etiological agent. Explain the pathogenesis of joint infection and subsequent cartilage destruction. Identify the clinical features of acute septic arthritis in children and adults. Identify key diagnostic investigations. Outline the management plan. Discuss its potential complications.	Orthopedics	Septic Arthritis
MS2- Orth - 011	Define clubfoot and describe its anatomical deformities. Explain the embryological and etiological basis of clubfoot. Describe the clinical presentation and methods of clinical assessment. Outline the principles of management with emphasis on non-surgical correction. Describe indications for surgical intervention and explain operative correction.	Orthopedics/ Pediatric Surgery	Clubfoot (Congenital Talipes Equinovarus – CTEV)

	Discuss prognosis and importance of early detection and compliance with treatment.		
MS2- Orth - 012	Differentiate acute, subacute, and chronic forms of osteomyelitis. Identify its risk factors and describe its pathophysiology. Describe radiological features of osteomyelitis. Identify typical clinical features of osteomyelitis. Outline management strategies and discuss complications.	Orthopedics / integrate with Pathology	Osteomyelitis
	Define severe trauma and recognize its impact on morbidity and mortality. Describe the concept of the “golden hour” and its relevance in trauma care. Apply the principles of primary survey (ABCDE) for		

MS2- Orth - 013	rapid assessment and stabilization. Identify immediate life-threatening conditions requiring urgent intervention. Outline the steps of secondary survey for detailed evaluation after initial stabilization. Discuss the role of resuscitation, monitoring, and adjunct investigations in trauma management. List the indications for urgent surgical referral and definitive management.	Orthopedic/ Surgery / Emergency Medicine	Early Assessment and Management of Severe Trauma
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	Define traumatic brain injury and classify it by severity and type. Describe the pathophysiology of primary and secondary brain injury.		
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MS2-Orth-014	Identify the clinical features of TBI, including altered consciousness, focal neurological deficits, and signs of raised intracranial pressure. Apply the principles of initial assessment using ATLS framework with emphasis on Glasgow Coma Scale. Identify red flag signs that indicate urgent neurosurgical referral. Discuss the role of imaging in diagnosis and follow-up. Outline plan for acute management and identify potential complications.	General Surgery / Neurosurgery / Emergency Medicine	Traumatic Brain Injury
	Classify spinal and cervical spine trauma injuries by mechanism and level.		

MS2- Orth- 015	Describe the pathophysiology of spinal cord injury, including primary and secondary injury processes. Identify the clinical features of cervical and thoracolumbar spine trauma. Apply the principles of initial assessment and stabilization. Identify key radiological investigations for diagnosis and assessment of stability. Plan initial management and enumerate complications of spine trauma. Identify indications for surgical versus conservative management of spinal injuries.	Orthopedics/ Neurosurgery	Neck and spine trauma
	Classify common facial fractures.		

MS2-Orth-016	Describe key clinical features and complications, including airway compromise. Explain initial assessment and stabilization in facial injuries.	Maxillofacial Surgery/ Emergency medicine	Maxillofacial trauma
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	Identify appropriate diagnostic investigations, especially imaging. Outline plan for definitive management and multidisciplinary care.		
MS2-Orth-017	Define thoracic trauma and classify it into blunt and penetrating types. Describe life-threatening chest injuries including tension pneumothorax, massive hemothorax, flail chest, cardiac tamponade. Apply the principles of initial assessment and	Surgery/ Emergency medicine	Thoracic trauma

	stabilization using the ATLS approach. Identify key diagnostic tools for evaluation. Outline principles of acute management		
MS2-Orth-018	Classify abdominal trauma based on mechanism and organ involvement. Identify the clinical presentation and red flag signs indicating severe intra-abdominal injury. Discuss the role of bedside and imaging investigations in diagnosis. Outline the early surgical and supportive management plan to prevent morbidity and mortality.	Surgery/ Emergency medicine	Abdominal trauma

MS2-Orth-019	Describe the common types and mechanisms of extremity trauma. Identify life- and limb-threatening conditions. Apply principles of initial assessment and stabilization. Outline indications for urgent referral to orthopedic/trauma specialists. Educate patients and attendants regarding basic care, need for follow-up, and complications.	Orthopedic/ Emergency medicine	Extremity trauma
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PATHOLOGY, PHARMACOLOGY, COMMUNITY MEDICINE		
		TOTAL HOURS =

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
MS2- Pa- 001	Describe the morphological features of acute and chronic osteomyelitis.	Pathology	MSK Diseases & Tumors
	Discuss the etiology, pathophysiology, morphology, clinical manifestations and diagnostic criteria of Rheumatoid Arthritis (RA)		
	Discuss the etiology, pathophysiology, morphology, clinical manifestations and diagnostic criteria of Osteoarthritis (OA)		
	Discuss the etiology, pathophysiology, morphology, clinical manifestations and diagnostic criteria of Crystal Arthritis (Gout/Pseudogout).		
	Describe the pathophysiology and morphology of Paget disease		

	Classify bone, cartilaginous and soft tumors.		
	Discuss the etiology, pathophysiology, morphology, clinical manifestations and radiological findings of bone, cartilaginous and soft tumors.		
MS2- Ph- 001	Classify the drugs used in acute and chronic gout. Describe key pharmacokinetic parameters of commonly used anti-gout drugs. Explain the mechanism of action, clinical uses, and important adverse effects of NSAIDs, colchicine, corticosteroids, xanthine oxidase inhibitors, uricosurics, and uricase in the management of acute and chronic gout. Recognize major toxicities and contraindications of anti-gout drugs	Pharmacology	Anti-gout drugs

	Classify the drugs used in RA (NSAIDs,		
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MS2- Ph- 002	corticosteroids, DMARDs, biologics, targeted therapies, opioids) Describe key pharmacokinetic aspects of major drug groups. Explain the mechanism of action of NSAIDs, corticosteroids, conventional DMARDs, biologics, and JAK inhibitors in context of Rheumatoid arthritis. Discuss the clinical role of major drug categories in the management of rheumatoid arthritis and other rheumatologic disorders. Identify important adverse effects, major toxicities, precautions, and contraindications of RA drugs	Pharmacology	Drugs for Rheumatoid arthritis
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MS2- CM- 001	Define ergonomics and explain its relevance in the school environment. Identify common ergonomic risk factors in schools. Recognize health problems associated with poor school ergonomics. Explain methods to assess ergonomic hazards in the school setting. Propose preventive strategies and ergonomic interventions.	Community Medicine	School Ergonomics and Student Health
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CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 09	
		INTEGRATING DISCIPLINE	TOPIC

MS2- Pa- 002	Interpret various investigations related to joint diseases including: i. Complete Blood Count (CBC) ii. Erythrocyte Sedimentation rate (ESR) iii. C-reactive protein (CRP) iv. Creatine Kinase (CK) v. Rheumatoid factor (RF) vi. Antinuclear antibody (ANA) vii. Anti-Neutrophil Cytoplasmic Antibodies (ANCA) viii. Serum uric acid level	Pathology	
	Identify morphological features of Osteomyelitis (Pictorial/slide).	Pathology	
	Identify morphological features of Osteogenic sarcoma (Pictorial/slide). Identify morphological features of lipoma and hemangioma.	Pathology	

	Interpret related cultures for diagnosis for infections	Microbiology, Pathology	Test Interpretation
MS2- Ra- 001	Interpret imaging tests to evaluate various musculoskeletal disorders including: i. X-rays ii. Computed tomography (CT) Scans iii. Ultrasound Scans iv. Bone Scans	Radiology	
MS2- Ph- 003	Analyze and interpret different drugs (Neuromuscular blockers) on animals through online videos / simulations / graphs / practical performance.	Pharmacology	MSK & locomotion

	Analyze and interpret different concentrations of drugs (atracurium or skeletal muscle relaxant) on Frog's rectus muscle through online videos / simulations / graphs / practical performance.		
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	Prescription writing for the following clinical conditions: Rheumatoid Arthritis, Gout (acute and chronic), Osteoarthritis		
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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. Practical 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	A collection of student's work that showcases learning achievements, reflections, and progress over time. 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)
13.	Seminar	A seminar is an academic or professional setting where individuals discuss, present, and explore specific topics, often with expert guidance

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	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 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. Two 50- inch LCD screens provide students an opportunity to get entertained during their meal times.
8.	Gymnasium & Sports	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.

		The gym itself is fully equipped with modern machinery both for students and faculty.
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.

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.

Internal Assessment Weightage	20%	100%
External Assessment Weightage	80%	

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



Avicenna Medical & Dental College
3rd Year MBBS (M-22)
Test Schedule Block-8

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 rd . Professional						
Block-8						
Subject	Written Exam		Oral/Practical/Clinical Exam			
	MCQ (1 mark)	Marks	OSPE /OSCE (8 marks each observed)	OSCE (10 marks each observed)	OSVE (14 marks each observed)	Marks
Pharmacology	22	22	03	-	01	38
Pathology	55	55	04	-	02	60
Community Medicine	04	04	-	-	-	-
Surgery	20	20	01	-	-	08
Medicine	20	20	01	-	-	08
Forensic	15	15	01	-	-	08
Behavioral	02	02	-	-	-	-
Patient Safety	02	02	-	-	-	-
CFRC	-	-	01	-	-	08
PERLs + Expository	-	-	-	01	-	10
Total	140	140	11 stations x 08 = 88	01 stations x 10 = 10	03 stations x 14=42	140

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. Mowdat 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.

Patient 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. NasibR. 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. DeMaio

Knight B. Simpson's Forensic Medicine.

Knight and Pekka. Principles of Forensic Medicine

Forensic Pathology

Forensic pathology 2nd edition by V.J. DeMaio 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.

