

AVICENNA MEDICAL & DENTAL COLLEGE



STUDY GUIDE

2025

Occlusion I

BLOCK 3 - MODULE 9



Program: BDS
Year: 1st Professional Year
Batch No: D-24
Session: 2024-2025

Table of Contents

List of Abbreviations	3
Curriculum Framework	8
Introduction to the Study Guide	9
Objectives of the Study Guide	9
Introduction to Module	10
Module Committee	11
Curriculum Map	12
Timetable	13
Allocation of Hours	15
Modular Outcomes	16
Learning Objectives	18
Operational Definitions	37
Internal Assessment Policy	39
Assessment Criteria and Weighting	40
Assessment Procedures	41
Appeal Process	41
Attendance Requirement & Internal Assessment Criteria	41
Assessment Guidelines	41
Assessment Schedule	43
Table of Specification	44
Recommended Books & Reading Resources	45
About Avicenna Medical College	52
Infrastructure Resources	52
7-Star Doctor Competencies (PMDC)	54
Message from the Principal	54
Message from the Chairman	55
Vision & Mission	56

List of Abbreviations

Abbreviations	Subjects
UHS	University of Health Sciences
BDS	Bachelor of Dental Surgery
PRISME	Professionalism, Research, Informatics, Social Responsibility and Accountability, Management & Entrepreneurship, Ethics Evidence Based Dentistry
WHO	World Health Organization
A	Anatomy
AI	Artificial Intelligence
B	Biochemistry
GDC	General Dental Council
Ph	Pharmacology
P	Physiology
Pa	Pathology
OB	Oral Biology
OP	Oral Pathology
CD	Community Dentistry
OD	Operative Dentistry
AMIA	American Medical Informatics Association
AMEE	Association of Medical Education in Europe
BhS	Behavioral Sciences
CNS	Central Nervous System
GIT	Gastrointestinal Tract
CVS	Cardiovascular System
TMJ	Temporomandibular Joint
CBC	Complete Blood Count
ESR	Erythrocyte Sedimentation Rate
PCR	Polymerase Chain Reaction
ED50	Median Effective Dose
LD50	Median Lethal Dose

TD50	Median Toxic Dose
AUC	Area Under Curve
MCV	Mean Corpuscular Volume
MCH	Mean Corpuscular Hemoglobin
MCHC	Mean Corpuscular Hemoglobin Concentration
Na	Sodium
K	Potassium
DNA	Deoxyribonucleic Acid
TORCH	Toxoplasmosis, Other, Rubella, Cytomegalovirus, Herpes simplex
CF	Craniofacial
CFII	Craniofacial II
Car	Cariology
DEJ	Dentin enamel Junction
HERS	Hertwig's Epithelial Root Sheath
FDI	Fédération Dentaire Internationale
GAGs	Glycosaminoglycans
EFA	Essential Fatty Acids
Hb	Hemoglobin
HbA1c	Glycated Hemoglobin
ATP	Adenosine Triphosphate
RBC	Red Blood Cell
NMJ	Neuromuscular Junction
ID50	Median Infectious Dose
RCTs	Randomized Control Trials

CURRICULUM FRAMEWORK

BDS Integrated Curriculum 2K25

Version 01

YEAR-1 MODULES

Block-1

1. Foundation (Cell)
2. Craniofacial-I
3. Cariology-I

Block-2

4. Craniofacial-II
5. Neurosciences
6. Alveo-Cemental Complex

Block-3

7. Blood & Cardiovascular System
8. Gastrointestinal Tract
9. Occlusion-I

PRISME

Professionalism, Research, Informatics (Dental), Social Responsibility, Management/Entrepreneurship and Evidence Based Dentistry)

Islamiyat/Civics & Pakistan Studies

Introduction to the Study Guide

Welcome to the Avicenna Dental College Study Guide!

This guide serves as your essential resource for navigating the complexities of your dental education at Avicenna 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:

- o 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:

- o 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:

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

4. Curriculum Framework:

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

5. Assessment Preparation:

- o 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:

- o 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:

- o 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

- Occlusion forms the cornerstone of understanding normal dental anatomy, function, and the dynamic relationships between the teeth, and associated structures.
- The Occlusion 1 module, focusing on incisors and canines is a foundational course designed to equip dental undergraduates with essential knowledge and skills for analyzing, diagnosing, and managing occlusal relationships and related conditions.
- By concentrating on anterior segments in this module, students can build a solid understanding of occlusal principles before advancing to more complex posterior and full-arch concepts.
- By focusing on incisors and canines, this module ensures a systematic and progressive approach to mastering occlusion, bridging the gap between dental anatomy and complex clinical procedures.
- This early exposure to occlusion will enhance students' ability to deliver functionally and esthetically sound treatments, setting the stage for more advanced learning in their dental education.

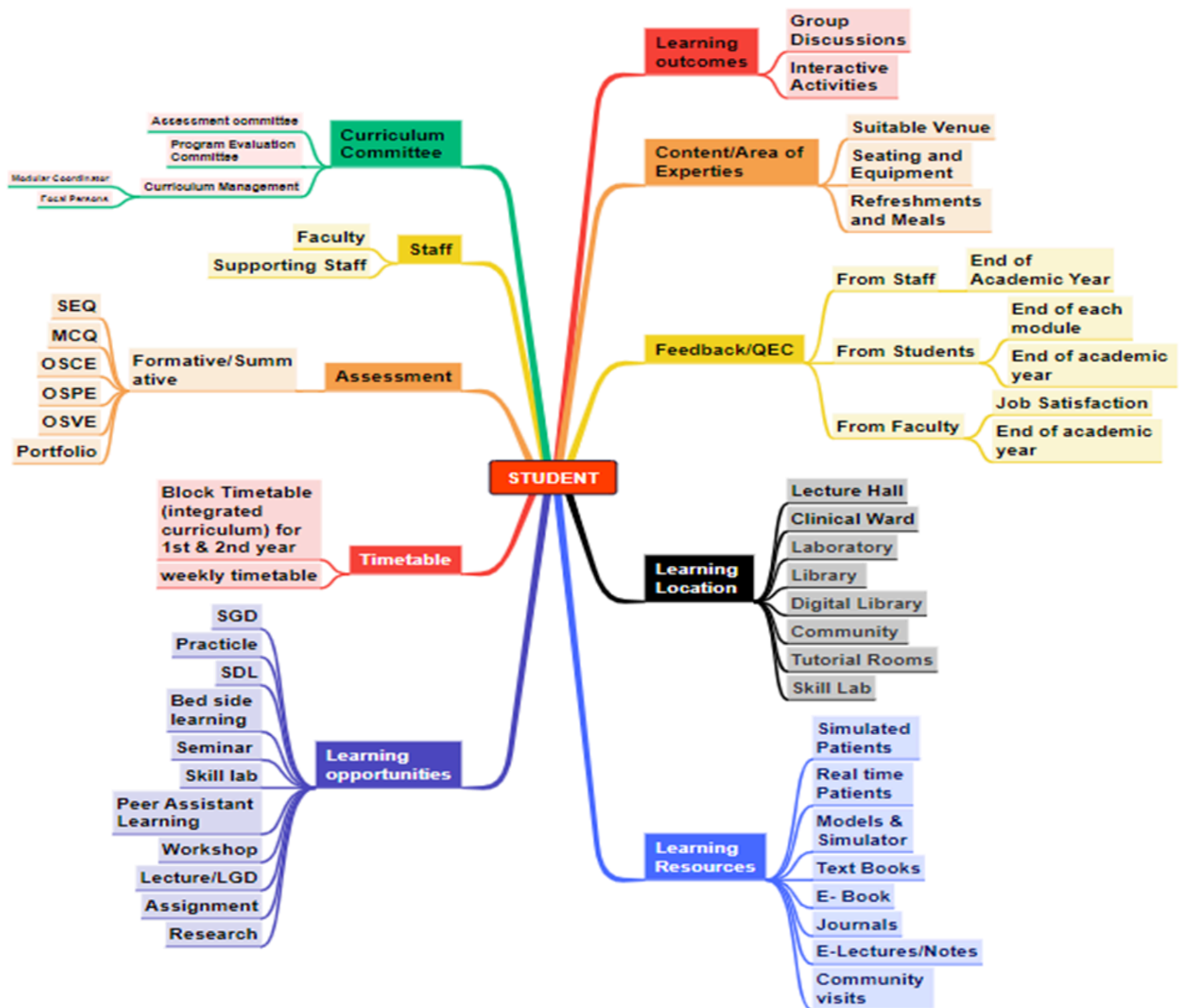
Block 1			Block 2			Block 3			Spirals			
Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8	Module 9	Module A	Module B	Module C	Module D
Foundation (Cell)	Craniofacial I	Cariology I	Craniofacial II	Neurosciences I	Alveo- mental complex	Blood & Cardiovascular System	Gastrointestinal Tract	Occlusion I	Islamiat	Pakistan Studies	PRISME	Holy Quran
190 Hours	95 Hours	72 Hours	111 Hours	154 Hours	48 Hours	153 Hours	115 Hours	34 Hours	30 Hours	30 Hours	60 Hours	54 Hours
6 Weeks	3 Weeks	3 Weeks	4 Weeks	6 Weeks	2 Weeks	5 Weeks	4 Weeks	2 Weeks	Contact sessions held across the whole academic year			
12 Weeks			12 Weeks			12 Weeks						
36 Weeks												

BLOCK 3 – MODULE 9

Module Coordinator		
Oral Biology & Tooth Morphology - Prof. Dr. Raheela Yasmin		
Module Committee Members		
1	Oral Biology & Tooth Morphology	Prof. Dr. Sana Chaudhry

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

Module 9 Timetable								
BDS 1st Year – D24								
Week – 35								
12th January 2025 to 16th January 2025								
Day & Time	8:00 to 9:00	9:00 to 10:00	10:00 to 11:00	11:00 to 11:30	11:30 to 12:30	12:30 to 1:30	1:30 to 2:30	2:30 to 3:30
Monday 12th January 2025	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Deciduous canines Facilitator: Dr. Sana Dental Lecture Hall –1	PRISME (Dental Education) (Theory) Topic: Leadership & Management Facilitator: Dr. Salar Dental Lecture Hall –1	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Permanent Canines Facilitator: Dr. Raheela Dental Lecture Hall –1	Break	PRISME (Behavioural Sciences) (Theory) Topic: Designing and Modulating Prompts Facilitator: Dr. Naurose Dental Lecture Hall –1	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Islamiat (Theory) Topic: Important point of hajj Facilitator: Ms. Amna Dental Lecture Hall –1
Tuesday 13th January 2025	PRISME (Behavioural Sciences) (Theory) Topic: Ethics Facilitator: Dr. Naurose Dental Lecture Hall –1	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Deciduous canines Facilitator: Dr. Sana Dental Lecture Hall –1	PRISME (Dental Education) (Theory) Topic: Teamwork Facilitator: Dr. Salar Dental Lecture Hall –1	Break	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Permanent Canines Facilitator: Dr. Raheela Dental Lecture Hall –1	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Pakistan Studies (Theory) Topic: History of Pakistan 1858 to 1947 Facilitator: Ms. Amna Dental Lecture Hall –1
Wednesday 14th January 2025	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Deciduous canines Facilitator: Dr. Sana Dental Lecture Hall –1	PRISME (Behavioural Sciences) (Practical) Topic: Communication Skills Facilitator: Dr. Farhat Dental Lecture Hall –1	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Permanent Canines Facilitator: Dr. Raheela Dental Lecture Hall –1	Break	PRISME (Community Dentistry) (Theory) Topic: {Career Pathways} Goal Development Facilitator: Dr. Salar Dental Lecture Hall –1	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Islamiat (Theory) Topic: Important point of hajj Facilitator: Ms. Amna Dental Lecture Hall –1
Thursday 15th January 2025	PRISME (Dental Education) (Theory) Topic: Research Facilitator: Dr. Salar Dental Lecture Hall –1	Oral Biology (Theory) Code: Oc1-OB-004 Topic: Forensic odontology Facilitator: Dr. Sana Dental Lecture Hall –1	PRISME (Behavioural Sciences) (Theory) Topic: Time Management Facilitator: Dr. Farhat Dental Lecture Hall –1	Break	Oral Biology (Theory) Code: Oc1-OB-003 Topic: Permanent Canines Facilitator: Dr. Raheela Dental Lecture Hall –1	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Pakistan Studies (Theory) Topic: History of Pakistan 1858 to 1947 Facilitator: Ms. Amna Dental Lecture Hall –1
Day & Time	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	
Friday 16th January 2025	Assessment Slot	Assessment Slot	Assessment Slot	Assessment Slot	Oral Biology (Practical) Code: Oc1-Ou-006 Topic: Deciduous & Permanentcanines Facilitator: Dr. Anushay / Dr. Faveesh Department Lab	Jummah Break	Holy Quran (Theory) Topic: Concept of Faith Facilitator: Ms. Amna Dental Lecture Hall –1	
	Module Exam 9							

Module 9 Timetable								
BDS 1st Year - D24								
Week - 35								
12th January 2026 to 16th January 2026								
Day & Time	8:00 to 9:00	9:00 to 10:00	10:00 to 11:00	11:00 to 11:30	11:30 to 12:30	12:30 to 1:30	1:30 to 2:30	2:30 to 3:30
Monday 12th January 2026	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Deciduous canines Facilitator: Dr Sana Dental Lecture Hall -1	PRISME (Dental Education) (Theory) Topic: Leadership & Management Facilitator: Dr. Salar Dental Lecture Hall -1	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Permanent Canines Facilitator: Dr Raheela Dental Lecture Hall -1	Break	PRISME (Behavioural Sciences) (Theory) Topic: Designing and Modulating Prompts Facilitator: Dr. Naurose Dental Lecture Hall -1	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Islamiat (Theory) Topic: Important point of hajj Facilitator: Ms Amna Dental Lecture Hall -1
Tuesday 13th January 2026	PRISME (Behavioural Sciences) (Theory) Topic: Ethics Facilitator: Dr. Naurose Dental Lecture Hall -1	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Deciduous canines Facilitator: Dr Sana Dental Lecture Hall -1	PRISME (Dental Education) (Theory) Topic: Teamwork Facilitator: Dr. Salar Dental Lecture Hall -1	Break	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Permanent Canines Facilitator: Dr Raheela Dental Lecture Hall -1	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Pakistan Studies (Theory) Topic: History of Pakistan 1858 to 1947 Facilitator: Ms Amna Dental Lecture Hall -1
Wednesday 14th January 2026	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Deciduous canines Facilitator: Dr Sana Dental Lecture Hall -1	PRISME (Behavioural Sciences) (Practical) Topic: Communication Skills Facilitator: Dr. Farhat Dental Lecture Hall -1	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Permanent Canines Facilitator: Dr Raheela Dental Lecture Hall -1	Break	PRISME (Community Dentistry) (Theory) Topic: (Career Pathways) Goal Development Facilitator: Dr. Salar Dental Lecture Hall -1	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Islamiat (Theory) Topic: Important point of hajj Facilitator: Ms Amna Dental Lecture Hall -1
Thursday 15th January 2026	PRISME (Dental Education) (Theory) Topic: Research Facilitator: Dr. Salar Dental Lecture Hall -1	Oral Biology (Theory) Code: Oc1 OB 004 Topic: Forensic odontology Facilitator: Dr Sana Dental Lecture Hall -1	PRISME (Behavioural Sciences) (Theory) Topic: Time Management Facilitator: Dr. Farhat Dental Lecture Hall -1	Break	Oral Biology (Theory) Code: Oc1 OB 003 Topic: Permanent Canines Facilitator: Dr Raheela Dental Lecture Hall -1	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Pakistan Studies (Theory) Topic: History of Pakistan 1858 to 1947 Facilitator: Ms Amna Dental Lecture Hall -1
Day & Time	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	
Friday 16th January 2026	Assessment Slot	Assessment Slot	Assessment Slot	Assessment Slot	Oral Biology (Practical) Code: Oc1 Os 006 Topic: Deciduous & Permanentcanines Facilitator: Dr Anushey / Dr Faseeh Department Lab	Jumma Break	Holy Quran (Theory) Topic: Concept of faith Facilitator: Ms Amna Dental Lecture Hall -1	
	Module Exam 9							

BLOCK 3 – MODULE 9

Module Coordinator		
Oral Biology & Tooth Morphology - Prof. Dr. Raheela Yasmin		
Module Committee Members		
1	Oral Biology & Tooth Morphology	Prof. Dr. Sana Chaudhry

Modular Outcomes

Module Name	Modular Outcomes
Block 3 Module 9 Occlusion I	<ul style="list-style-type: none">• Describe the morphology and functional roles of incisors and canines in occlusal dynamics.• Analyze the occlusal relationship of incisors and canines using models, articulators, and clinical examinations.• Demonstrate an understanding of the importance of incisors and canine's occlusion in maintaining oral function and preventing dysfunction.

Learning Objectives

Session	Section/ class code	Week No	subject	TOTAL HOURS in a week	No of lectures subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2025		34	Oral Biology	1	1	Theory (Lecture)	Occlusion	Oc1-OB-1	Describe the basic concepts of occlusion and its importance and relevance in dentistry.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela
2024-2025		34	Oral Biology	1	2	Theory (Lecture)	Deciduous incisors	Oc1-OB-2	Deciduous incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Prof. Dr. Sana
2024-2025		34	Oral Biology	1	3	Theory (Lecture)	Permanent incisors	Oc1-OB-2	Permanent incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela

2024-2 025		34	Oral Biology	1	4	Theory (Lecture)	Deciduous incisors	Oc1-OB- 2	Deciduous incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Prof. Dr. Sana
2024-2 025		34	Oral Biology	1	5	Theory Lecture	Permanent incisors	Oc1-OB- 2	Permanent incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela
2024-2 025		34	Oral Biology	1	6	Theory Lecture	Deciduous incisors	Oc1-OB- 2	Deciduous incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Prof. Dr. Sana
2024-2 025		34	Oral Biology	1	7	Theory Lecture	Permanent incisors	Oc1-OB- 2	Permanent incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela
2024-2 025		34	Oral Biology	1	8	Theory Lecture	Deciduous incisors	Oc1-OB- 2	Deciduous incisors	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Prof. Dr. Sana

2024-2 025		34	Oral Biology	1	1	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Draw the outlines of all deciduous & permanent incisors: labial, lingual, medial, distal and incisal aspects.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2 025		34	Oral Biology	1	2	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Draw the outlines of all deciduous & permanent incisors: labial, lingual, medial, distal and incisal aspects.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

2024-2 025		34	Oral Biology	1	3	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Label each aspect pointing their morphological features (Incisal corners, marginal ridges, fossa, cingulum, pit, developmental depressions, imbrication lines & contact points)	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2 025		34	Oral Biology	1	4	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Label each aspect pointing their morphological features (Incisal corners, marginal ridges, fossa, cingulum, pit, developmental depressions, imbrication	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

									lines & contact points)			
2024-2 025		34	Oral Biology	1	5	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Carve anatomically accurate models of incisors from soap blocks.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2 025		34	Oral Biology	1	6	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Carve anatomically accurate models of incisors from soap blocks.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2 025		34	Oral Biology	1	7	Practical	Deciduous & Permanent Incisors	Oc1-OB- 005	Identification on models (Permanent Incisors)	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2 025		34	Oral Biology	1	8	Practical	Deciduous & Permanent Incisors	Oc1-OB- 006	Draw the outlines of all deciduous & permanent canines: labial, lingual, mesial, distal & incisal aspects	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

2024-2 025		34	Oral Biology	1	9	Practical	Deciduous & Permanent Incisors	Oc1-OB- 006	Draw the outlines of all deciduous & permanent canines: labial, lingual, mesial, distal & incisal aspects	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
---------------	--	----	-----------------	---	---	-----------	--------------------------------------	----------------	--	---	--	------------------------------

2024-2025		34	PRISME (Behavioural Sciences)	1	3	Lecture	Legal Foundations in Public Dental Practice		<p>Articulate health as a fundamental human right.</p> <p>Explain confidentiality obligations in community dental programs.</p> <p>Summarize dentists' legal responsibilities during public health initiatives.</p> <p>Provide examples of patient legal protections in community dental services.</p>	1		Dr. Naurose
-----------	--	----	----------------------------------	---	---	---------	---	--	--	---	--	-------------

2024-2025		34	PRISME (Community Dentistry)	1	1	Lecture + Practical	Literature Search & Literature Review		<p>Conduct effective literature searches through searching databases (PubMed, Google Scholar etc.)</p> <p>Learn research through keywords and MESH terminologies</p> <p>Identify the structure of research article (IMRAD)</p> <p>Critically review scientific papers (Observational Studies only).</p> <p>Identify problem and gap in scientific literature</p>	1		Dr Lubna
-----------	--	----	---------------------------------	---	---	---------------------	---------------------------------------	--	--	---	--	----------

2024-2025		34	PRISME (Behavioural Sciences)	1	2	Lecture	Foundations of Artificial Intelligence (non-coding)	<p>Define Artificial Intelligence.</p> <p>Foundations of Artificial Intelligence (non-coding)</p> <p>Enlist the types of Artificial Intelligence (AI) based on capabilities and functionality</p> <p>Define Generative AI and which Category of Artificial Intelligence does it belong?</p> <p>Define and Enlist Types of Generative AI i.e. Single Modality Generative AI and Multimodal Generative AI Model along with Examples</p> <p>Compare and Contrast between Large Language Models (LLM) and Large Multimodal</p>	1		Dr. Naurose
-----------	--	----	----------------------------------	---	---	---------	---	--	---	--	-------------

									Models (LMM). Also compare both the models with conventional rule base AI.			
2024-2 025		34	PRISME (Communi ty Dentistry)	1	3	Lecture	EBD Foundations		Define and explain the concept and importance of Evidence-Based Dentistry. Differentiate between levels of evidence and types of research (e.g., RCTs, cohort studies, case reports).	1		Dr Lubna
2024-2 025		34	PRISME (Communi ty Dentistry)	1	1	Practical	Assessment		Conduct Mock exercise of literature review to be carried out led by faculty (To be attended by all research proposal/synopsis supervisors for second year BDS	1		Dr Lubna

2024-2025		34	PRISME (Behavioural Sciences)	1	2	Lecture	Ethical, Social and Legal Implications of AI		<p>Describe World Health Organization's ethical principles for AI in health.</p> <p>Explain the principles and applications of Artificial Intelligence (AI) in various dental specialties, and evaluate its current use in diagnostic and clinical practices, particularly in low- and middle-income countries (LMICs).</p> <p>Critically assess the challenges, ethical considerations, and future opportunities for integrating AI into dental education and practice in LMIC settings.</p> <p>Identify and critically analyse the major risks posed by use of AI in healthcare—including hallucination, dataset bias,</p>	1		Dr. Naurose
-----------	--	----	----------------------------------	---	---	---------	--	--	--	---	--	-------------

2024-2 025		34	PRISME (Dental Education)	1	3	Lecture	Stress Copy Mechanism			1		Dr Salar
2024-2 025		34	PRISME (Behavioural Sciences)	1	1	Lecture	Generative AI		Generate a patient-friendly post-op instruction sheet via Gen-AI with ≥90 % factual accuracy after peer-review. Modify the prompt to accommodate dyslexic patients (font & readability) and patients with low health literacy.	1		Dr. Naurose
2024-2 025		34				Revision Slot						
2024-2 025		34				Revision Slot						

2024-2 025		34				Revision Slot						
2024-2 026		34				Revision Slot						
2024-2 025		34	Holy Quran	1	1	Theory Lecture	Qadr		identify taqdeer as knowledge of Allah	1	Notes	Ms Amna
2024-2 025		34	Islamiyat	1	1	Theory (Lecture)	Pilgrime		Importance of hajj	1	Notes	Ms Amna
2024-2 025		34	Islamiyat	1	2	Theory (Lecture)	Conditions of hajj		which conditions become obligation	1	Notes	Ms Amna
2024-2 025		34	Pak Studies	1	1	Theory (Lecture)	14 Points		14 points of Quaid e Azam	1	Notes	Ms Amna
2024-2 025		34	Pak Studies	1	2	Theory (Lecture)	Tehreeq		Describe the muslim n adam tawun tehreeq	1	Notes	Ms Amna

Session	Section / class code	Week No	subject	TOTAL HOURS in a week	No of lectures subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2025		35	Oral Biology	1	1	Theory (Lecture)	Deciduous canines	Oc1-OB-003	Deciduous canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Sana
2024-2025		35	Oral Biology	1	2	Theory (Lecture)	Permanent Canines	Oc1-OB-003	Permanent Canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela
2024-2025		35	Oral Biology	1	3	Theory (Lecture)	Deciduous canines	Oc1-OB-003	Deciduous canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Sana
2024-2025		35	Oral Biology	1	4	Theory (Lecture)	Permanent Canines	Oc1-OB-003	Permanent Canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela

2024-20 25		35	Oral Biology	1	5	Theory Lecture	Deciduous canines	Oc1-OB -003	Deciduous canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Sana
2024-20 25		35	Oral Biology	1	6	Theory Lecture	Permanent Canines	Oc1-OB -003	Permanent Canines	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Raheela
2024-20 25		35	Oral Biology	1	7	Theory Lecture	Forensic odontology	Oc1-OB -004	Define forensic odontology and explain the significance of forensic odontology in dental identification and legal investigations.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Sana
2024-20 25		35	Oral Biology	1	8	Theory Lecture	Permanent Canines	Oc1-OB -003	Permanent Canines	1	Wheeler's Dental Anatomy,	Dr Raheela

											Physiology and Occlusion)	
2024-2025		35	Oral Biology	1	1	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Label each aspect pointing their morphological features (Incisal slopes, labial/lingual ridges, marginal ridges, fossa, cingulum, developmental depressions, imbrication lines & contact points)	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

2024-2025		35	Oral Biology	1	2	Practical	Deciduous & Permanent canines	Oc1-OB-006	Label each aspect pointing their morphological features (Incisal slopes, labial/lingual ridges, marginal ridges, fossa, cingulum, developmental depressions, imbrication lines & contact points)	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-2025		35	Oral Biology	1	3	Practical	Deciduous & Permanent canines	Oc1-OB-006	Identification on models (Permanent Canines)	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

2024-20 25		35	Oral Biology	1	4	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Carve anatomically accurate models of canines from soap blocks.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-20 25		35	Oral Biology	1	5	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Carve anatomically accurate models of canines from soap blocks.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-20 25		35	Oral Biology	1	6	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Describe the principles and purpose of preparing ground sections of teeth.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-20 25		35	Oral Biology	1	7	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Prepare a ground section of a tooth with appropriate	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh

									thickness for microscopic examination .			
2024-20 25		35	Oral Biology	1	8	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Recognize key structural details of enamel, dentin, and cementum in the sectioned sample.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-20 25		35	Oral Biology	1	9	Practical	Deciduous & Permanent canines	Oc1-OB - 006	Recognize key structural details of enamel, dentin, and cementum in the sectioned sample.	1	Wheeler's Dental Anatomy, Physiology and Occlusion	Dr Anushey / Dr Faseeh
2024-20 25		35	PRISME (Dental Education)	1	1	Theory Lecture	Leadership & Management			1		Dr. Salar

2024-2025		35	PRISME (Behavioural Sciences)	1	2	Theory Lecture	Designing and Modulating Prompts		Define what a “Prompt” is in the context of generative AI and identify its role in influencing the model's response. Explain how different types of prompts (instructional, role-based, and	1		Dr. Naurose 33
-----------	--	----	----------------------------------	---	---	-------------------	--	--	--	---	--	-----------------------

									<p>used when designing a prompt which influence AI generated responses—temperature , top-k, top-p, max tokens, frequency penalty, and presence penalty—and how are they applied appropriately to control creativity, coherence, and specificity.</p> <p>Demonstrate the ability to adjust at least three prompt modulation</p>			
--	--	--	--	--	--	--	--	--	--	--	--	--

									<p>techniques (e.g., temperature , contextual framing, and presence penalty) in a generative AI tool (e.g., ChatGPT, DALL-E, or GPT-4o etc) to produce two accurate and context-appropriate visual or textual outputs related to oral histology or tooth morphology.</p> <p>(The workflow</p>			
--	--	--	--	--	--	--	--	--	---	--	--	--

									should illustrate Prompt > Model > Output)			
2024-2025		35	PRISME (Behavioural Sciences)	1	3	Theory Lecture	Ethics		Write a clear, step-by-step plan for handling an ethical problem—such as being asked to create a fake radiograph with AI for a case report—showing how they would check the rules, seek guidance, and choose a safe and honest action and would	1		Dr. Naurose

									comply with legal and ethical standards.			
2024-2025		35	PRISME (Dental Education)	1	4	Theory Lecture	Teamwork			1		Dr. Salar
2024-2025		35	PRISME (Behavioural Sciences)	1	5	practical	Communication Skills		Apply effective verbal and non-verbal communication strategies to enhance clarity, teamwork, and decision-making in clinical and administrative dental settings	1		Dr. Farhat

2024-2025		35	PRISME (Dental Education)	1	6	Theory (Lecture)	(Career Pathways) Goal Development			1		Dr. Salar
2024-2025		35	PRISME (Dental Education)	1	7	Theory (Lecture)	Research			1		Dr. Salar
2024-2025		35	PRISME (Behavioural Sciences)	1	8	Theory (Lecture)	Time Management		Demonstrate techniques to manage academic time management	1		Dr. Farhat
2024-2025		35				Assessment						
2024-2025		35				Assessment						
2024-2025		35				Assessment						
2024-2026		35				Assessment						

2024-20 25		35	Holy Quran	1	1	Theory Lecture	Concept of faith		faith n evils	1	Notes	Ms Amna
2024-20 25		35	Islamiyat	1	1	Theory (Lecture)	Important point of hajj		manasik e hajj	1	Notes	Ms Amna
2024-20 25		35	Islamiyat	1	2	Theory (Lecture)	importance of hajj		unity in ummah	1	Notes	Ms Amna
2024-20 25		35	Pak Studies	1	1	Theory (Lecture)	History of Pakistan 1858 to 1947		describe the history	1	Notes	Ms Amna
2024-20 25		35	Pak Studies	1	2	Theory (Lecture)	role of Hazrat Mujadad alif sani		brief nots on Hazrat mujadad alif sani	1	Notes	Ms Amna

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	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

AVICENNA MEDICAL & DENTAL COLLEGE

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%	

Assessment Schedule

Avicenna Dental College 1st Year BDS Integrated (D24) - Session 2024-2025					
WEEK	DATE	DAY	SUBJECT	TEST	TOPIC / CODE
Commencement of Classes: 14th April 2025 Monday					
COMMENCEMENT OF MODULE - 1					
1	14th & 15th April Orientation Day				
3	Labour day 1st May 2025, Thursday				
3	2nd May 2025	Friday	(Oral Biology) (Pathology) (Behavi.Science) (Anatomy)	GRAND TEST - 1	Oral Biology: F-OB-001 / F-OB-001 Pathology Cell Injury F-Pa 001 / F-Pa 002 / F-Pa 003 / F-Pa 004 / F-Pa 005 / F-Pa 006 / F-Pa 007 / F-Pa-008 Behavi.Science: F-Bhs-001 / F-Bhs-002 / F-Bhs-003 / F-Bhs-004 / F-Bhs-005 Anatomy: F-A-001 / F-A-002 / F-A-006 / CF1-A-001 / CF1-A-002
4	Day off due to precautionary security measures				
5	16th May 2025	Friday	(Biochemistry) (Physiology) (Pathology) (Pharmacology)	GRAND TEST - 2	Biochemistry: F-B-001 / F-B-002 / 003 / 007 / 008 / 005 / 006 Physiology: F-P-001 / F-P-002 / F-P-003 / F-P-004 / F-P-005 / F-P-006 (Plasma proteins only) Pathology: F-Pa 010 / F-Pa 011 / F-Pa 012 Pharmacology: F-PH-001& 002 / F-PH-003& 005 / F-PH-004& 007 / F-PH-008& 006 Pharmacokinetics and pharmacodynamics

6	23rd May 2025	Friday	(Anatomy) (Biochemistry) (Oral Biology) (Community Dentistry)	GRAND TEST - 3	Anatomy: F-A-003 / F-A-004 / F-A-005 / F-A-006 / F-A-007 / CF1-A-003 Biochemistry: Insert here F-B-005 / F-B-006 F-B-009,010,012 Oral Biology: F-OB-002 / F-OB-006 Community Dentistry: Car1-CD-001 / Car1-CD-002 / Car1-CD-003
7	<u>Youme Takbeer</u> 28th May (Wednesday)				
COMMENCEMENT OF MODULE - 2					
8	2nd June 2025	Monday	Anatomy Physiology Biochemistry Oral Biology & Tooth Morphology General Pathology & Microbiology Pharmacology Community Dentistry	Module - 1 Exam	Complete Module - 1 Syllabus
<u>Eid-ul-Adha</u> 6th / 7th / 8th & 9th June 2025					
9	13th June 2025	Friday	Anatomy Oral Biology & Tooth Morphology General Pathology & Microbiology	Module - 2 Exam	Complete Module - 2 Syllabus
COMMENCEMENT OF MODULE - 3					

12	4th July 2025	Friday	Oral Biology & Tooth Morphology Biochemistry Community Dentistry Oral Pathology Operative Dentistry	Module - 3 Exam	Complete Module - 3 Syllabus
Ashura 5th & 6th July 2025					
COMMENCEMENT OF MODULE - 4					
14	14th July 2025	Monday	Anatomy Physiology Biochemistry Oral Biology & Tooth Morphology	Block 1 Exam (Theory)	Complete Block 1 Syllabus
14	15th July 2025	Tuesday	General Pathology & Microbiology Pharmacology Community Dentistry Oral Pathology Operative Dentistry	Block 1 Exam (Practical)	Complete Block 1 Syllabus
Summer Break 21st July 2025 to 17th August					
16	29th August 2025	Friday	Oral Biology & Tooth Morphology Anatomy Biochemistry General Pathology & Microbiology Pharmacology Physiology	Module - 4 Exam	Complete Module - 4 Syllabus
COMMENCEMENT OF MODULE - 5					

22	10th October 2025	Friday	Physiology Anatomy Biochemistry Pharmacology General Pathology & Microbiology	Module - 5 Exam	Complete Module - 5 Syllabus
COMMENCEMENT OF MODULE - 6					
24	24th October 2025	Friday	Oral Biology & Tooth Morphology Community Dentistry Dental Radiology (Oral Diagnosis/Oral Medicine) Periodontology General Pathology & Microbiology	Module - 6 Exam	Complete Module - 6 Syllabus
COMMENCEMENT OF MODULE - 7					
25	27th October 2025	Monday	Oral Biology & Tooth Morphology Anatomy Biochemistry General Pathology & Microbiology	Block 2 Exam (Theory)	Complete Block 2 Syllabus
25	28th October 2025	Tuesday	Pharmacology Physiology Community Dentistry Dental Radiology (Oral Diagnosis/Oral Medicine) Periodontology	Block 2 Exam (Practical)	Complete Block 2 Syllabus
29	28th November 2025	Friday	Anatomy Biochemistry Physiology General Pathology & Microbiology Pharmacology	Module - 7 Exam	Complete Module - 7 Syllabus

COMMENCEMENT OF MODULE - 8					
Winter Break / Quaid E Azam Day 22nd To 26th December 2025					
33	2nd January 2025	Friday	Anatomy Oral Biology & Tooth Morphology Physiology Biochemistry Pharmacology General Pathology & Microbiology Oral Pathology Community Dentistry	Module - 8 Exam	Complete Module - 8 Syllabus
COMMENCEMENT OF MODULE - 9					
35	16th January 2025	Friday	Oral Biology & Tooth Morphology	Module - 9 Exam	Complete Module - 9 Syllabus
36	19th January 2025	Monday	Anatomy Biochemistry Physiology General Pathology & Microbiology	Block 3 Exam (Theory)	Complete Block 3 Syllabus
	20th January 2025	Tuesday	Pharmacology Oral Biology & Tooth Morphology Oral Pathology Community Dentistry	Block 3 Exam (Practical)	Complete Block 3 Syllabus
	23rd January 2025	Friday	Islamiat / Pak. Study	Send Up Islamiat / Pak. Study	Complete Syllabus

	26th January 2025	Monday	Anatomy Physiology Biochemistry Oral Biology & Tooth Morphology General Pathology & Microbiology Pharmacology Community Dentistry Oral Pathology Operative Dentistry	SENDUP Block 1	Block 1 Complete Syllabus
	28th January 2025	Wednesday	Anatomy Physiology Biochemistry Oral Biology & Tooth Morphology General Pathology & Microbiology Pharmacology Community Dentistry Oral Pathology Operative Dentistry	Send Up Block 1 (Practical)	Block 1 Complete Syllabus
	30th January 2025	Friday	Oral Biology & Tooth Morphology Anatomy Biochemistry General Pathology & Microbiology Pharmacology Physiology Community Dentistry Dental Radiology (Oral Diagnosis/Oral Medicine) Periodontology	SEND UP Block 2	Block 2 Complete Syllabus

	2nd February 2025	Monday	Oral Biology & Tooth Morphology Anatomy Biochemistry General Pathology & Microbiology Pharmacology Physiology Community Dentistry Dental Radiology (Oral Diagnosis/Oral Medicine) Periodontology	Send Up Block 2 (Practical)	Block 2 Complete Syllabus
	4th February 2025	Wednesday	Anatomy Biochemistry Physiology General Pathology & Microbiology Pharmacology Oral Biology & Tooth Morphology Oral Pathology Community Dentistry	Send Up Block 3	Block 3 Complete Syllabus
	6th February 2025	Friday	Anatomy Biochemistry Physiology General Pathology & Microbiology Pharmacology Oral Biology & Tooth Morphology Oral Pathology Community Dentistry	Send Up Block 3 (Practical)	Block 3 Complete Syllabus

Table of Specification

BDS Integrated Curriculum 2K25, 1st Professional Exam							
BLOCK 3 - ASSESSMENT PARAMETERS AND DIVISION OF MARKS							
Subject	Written Exam			Oral/Practical Exam			
	MCQ (1 mark and 1 minute each)	SEQ (4 marks each and 11 minutes for each SEQ)	Marks	OSPE (9 Marks Each and 6 minutes each)	OSCE (9 Marks Each and 6 minutes each)	OSVE (6 Marks Each and 6 minutes each)	Marks
Anatomy	10	1	14	1	0	1	15
Physiology	22	2	30	1	1	1	24
Biochemistry	6	1	10	0	0	1	6
Oral Biology	12	1	16	3	0	1	33
General Pathology & Microbiology	12	2	20	2	0	1	24
Pharmacology	17	1	21	0	0	1	6
Community Dentistry	0	1	4	0	0	1	6
Oral Pathology	1	1	5	0	0	1	6
Total Questions	80	10		7	1	8	
Net Total	80x1=80	10x4=40	120	7x9=63	1x9=9	8x6=48	120
Internal Assessment Marks*	30			30			
Grand Total	150			150			

Table of Specification

Block 3 Internal Assessment for Theory Examination - 30 Marks		
Scoring Parameter	Percentage Allocation	Marks Allocation
Attendance in lectures*	20%	6
Block Examination (Theory)	50%	15
Continuous Assessment (Class Tests, Mock Exam, Assignments, Attitudes)	30%	9
Total	100%	30
* Attendance Marks will be according to the following criteria: 1. if 85 % = Eligible 2. if $> 90\% \leq 93\%$ = 3 marks 3. if $> 93\% \leq 95\%$ = 5 marks 3. if $> 95\%$ = 6 marks		
Block 3 Internal Assessment for Practical/ Tutorials Examination - 30 Marks		
Scoring Parameter	Percentage Allocation	Marks Allocation
Attendance in Practicals/ Tutorials*	20%	6
Block Examination (Practical/ Oral Examination)	50%	15
Continuous Assessment/ Log Books-Portfolio for PRISME / Practical Notebooks/ Assignments / Attitudes	30%	9
Total	100%	30
* Attendance Marks will be according to the following criteria 1. if 80 % = Eligible 2. if $> 90\% \leq 93\%$ = 3 marks 3. if $> 93\% \leq 95\%$ = 5 marks 3. if $> 95\%$ = 6 marks		

Recommended Books & Reading Resources

Block 3: Learning Resources

Subject	Learning Resources
Oral Biology & Tooth Morphology	<ol style="list-style-type: none">1. Nanci, A. Ten Cate's Oral Histology, Development, Structure, and Function (10th ed.)2. Berkovitz, B. K., Holland, G. R., & Moxham, B. J. Oral Anatomy, Histology, and Embryology (5th ed.)3. Kumar, G. S. Orban's Oral Histology & Embryology (13th ed.)4. Rajkumar, K. Oral Anatomy, Histology, Physiology & Tooth Morphology (2nd ed.)
Physiology	<ol style="list-style-type: none">1. Guyton & Hall. Textbook of Medical Physiology (14th ed.)
Gross Anatomy	<ol style="list-style-type: none">1. Snell's Clinical Anatomy by Regions (12th ed.)
Embryology	<ol style="list-style-type: none">1. Langman's Medical Embryology
Histology	<ol style="list-style-type: none">1. Siddiqui, L. H. Medical Histology: Text and Atlas
Biochemistry	<ol style="list-style-type: none">1. Rodwell, V. W., et al. Harper's Illustrated Biochemistry (32nd ed.)2. Abali, E. E., et al. Lippincott Illustrated Reviews: Biochemistry (8th ed.)
Behavioral Sciences	<ol style="list-style-type: none">1. Hand book of Behavioral sciences, by MH Rana, 3rd ed.2. Humayun A., Herbert M. (2010). Integrating behavioural sciences in healthcare. Islamabad: HEC.

Subject	Learning Resources
Histology	1. Siddiqui, L. H. Medical Histology: Text and Atlas
General Anatomy	1. Siddiqui, L. H. General Anatomy
Biochemistry	1. Rodwell, V. W., et al. Harper's Illustrated Biochemistry (32nd ed.) 2. Abali, E. E., et al. Lippincott Illustrated Reviews: Biochemistry (8th ed.)
Physiology	1. Guyton & Hall. Textbook of Medical Physiology (14th ed.)
Pathology	1. Kumar, V., et al. Robbins & Cotran Pathologic Basis of Disease (10th ed.)
Microbiology	1. Levinson, W. Review of Medical Microbiology & Immunology (18th ed.)
Pharmacology	1. Katzung & Trevor. Pharmacology Examination & Board Review (12th ed.) 2. Whalen, K. Lippincott Illustrated Reviews: Pharmacology (7th ed.)
Behavioral Sciences	1. Hand book of Behavioral sciences, by MH Rana, 3rd ed. 2. Humayun A., Herbert M. (2010). Integrating behavioural sciences in healthcare. Islamabad: HEC.

Resource Type	Learning Resources
Textbooks	1. Fuller, J. L. Concise Dental Anatomy & Morphology (4th ed.) 2. Nelson, S. J. Wheeler's Dental Anatomy, Physiology and Occlusion (1st SAE)
Reference Books	1. Woelfel's Dental Anatomy (Jones & Bartlett Learning) 2. Oral Biology and Tooth Morphology

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. Gulfreem 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.