

AVICENNA MEDICAL & DENTAL COLLEGE



STUDY GUIDE

2025

Neurosciences I

BLOCK 2 - MODULE 5



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

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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

- This module aims to provide a thorough understanding of the CNS, including its structure, function, and neurophysiological processes affecting motor and sensory systems.
- As future dental practitioners, students will learn how to address clinical scenarios involving neurological conditions like trigeminal neuralgia, Bell's palsy, and strokes.
- The module also covers the pharmacological management of these conditions to ensure safe and effective patient care, especially in those with neurological comorbidities

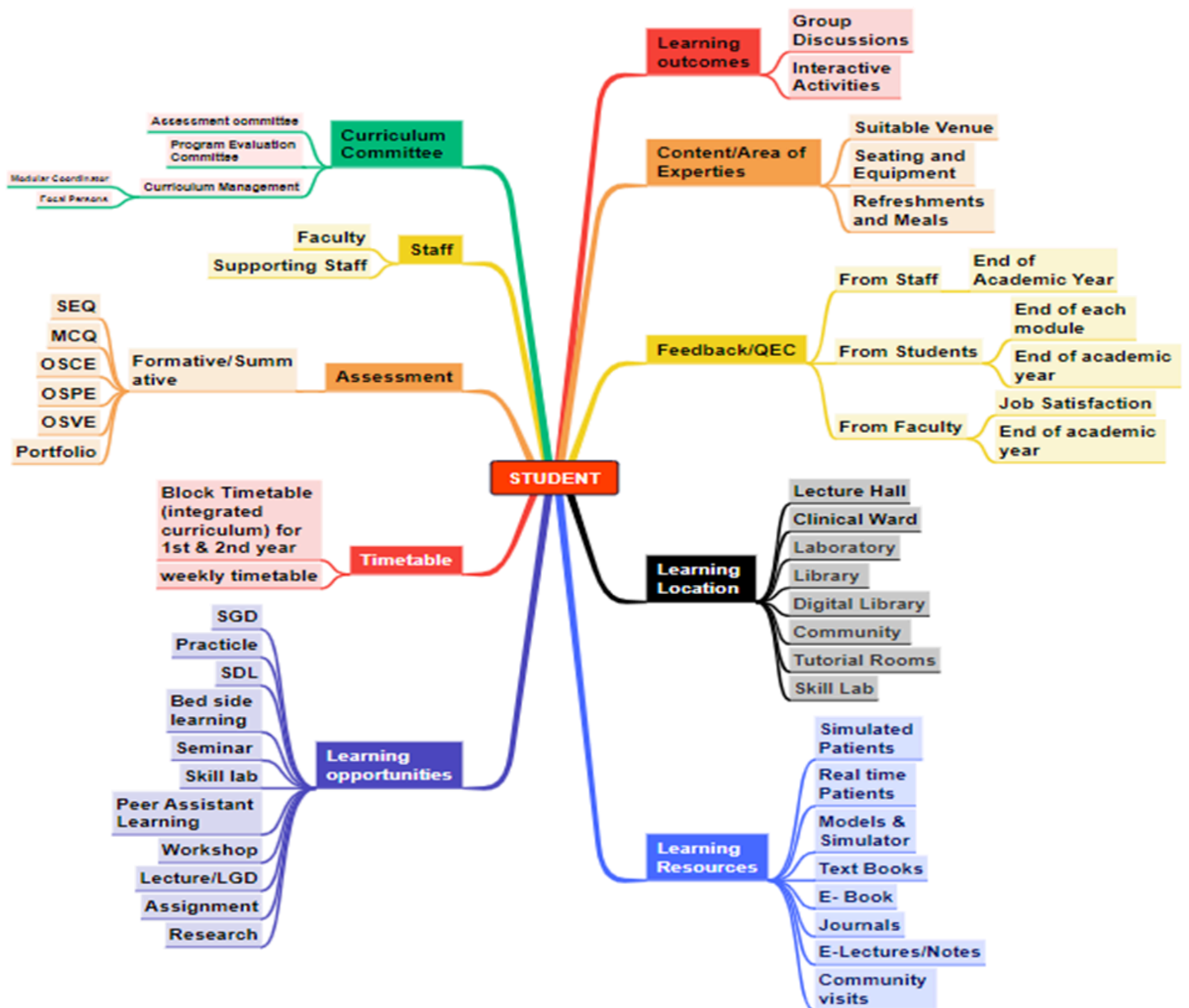
Block 1			Block 2			Block 3			Spirals			
Module 1	Module 2	Module 3	Modue 4	Module 5	Module 6	Module 7	Module 8	Module 9	Module A	Module B	Module C	Mod ule D
Foundat ion (Cell)	Craniofa cial I	Cariolo gy I	Craniof acial II	Neurosci ences I	Alveoce mental complex	Blood & Cardiov ascular System	Gastroin testinal Tract	Occlusi on I	Islamiat	Pakistan Studies	PRISME	Holy Qura n
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 Hour s
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 2 – MODULE 5

Module Coordinator		
Physiology - Prof. Dr. Sadia Zafar		
Module Committee Members		
1	Physiology	Dr. Syedda Amina Rizvi
2	Anatomy	Dr. Kanwal Khalid
3	Biochemistry	Dr. Haroon Habib
4	Pharmacology	Dr. Rubina Iqbal
5	General Pathology & Microbiology	Dr. Ishrat

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 5 Timetable								
BDS 1st Year - D24								
Week - 17								
1st September 2025 to 5th September 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 1st September 2025	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Dr. Amina Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph006 Topic: Introduction to ANS Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-001, NS-A-002, NS-A-003 Topic: Nervous System Overview, Neuron, Neuron Classification, Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-001 Topic: Infections of CNS Facilitator: Dr. Nadia salam Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-022 Topic: Sensory system Facilitator: Dr. Beenish Departmental Lab	Islamiat (Theory) Topic: Importance of Prayer Facilitator: Ms. Amna Dental Lecture Hall - 1
Tuesday 2nd September 2025	Biochemistry (Theory) Code: NS-B-002 Topic: Glutamine Metabolism Facilitator: Dr. Sadia Khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Dr. Nida Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-007 Topic: Cholinergic Drugs (agonists) Facilitator: Dr. Iqra Ijaz Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-008 Topic: Sympathetic vs. Parasympathetic System Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-002 Topic: Trauma to CNS Facilitator: Dr. Nadia salam Dental Lecture Hall - 1	Pakistan Studies (Theory) Topic: Define Ideology Facilitator: Ms. Amna Dental Lecture Hall - 1
Wednesday 3rd September 2025	Anatomy (Theory) Code: NS-A-004, NS-A-005, NS-A-006, NS-A-007 Topic: CNS & PNS Overview, Neuroglia, Receptors and Effectors, Receptor Classification Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-003 Topic: Hyperammonemia Facilitator: Dr. Sadia Khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-Ph-007 Topic: Cholinergic Drugs (antagonists) Facilitator: Dr. Sara Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-002 Topic: Sensory receptors, neuronal circuits for processing information Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-009, NS-A-010, NS-A-011, NS-A-012 Topic: Cranial Nerves Overview, Cranial Nerve Functions, Spinal Nerve Anatomy, Dermatome Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Islamiat (Theory) Topic: Importance of Prayer Facilitator: Ms. Amna Dental Lecture Hall - 1
Thursday 4th September 2025	General Pathology & Microbiology (Theory) Code: NS-Pa-003 Topic: Demyelinating disease of CNS Facilitator: Dr. Nadia salam Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-003 Topic: Sensory Receptors, Transduction of sensory stimuli into nerve impulses Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-003 Topic: Hyperammonemia Facilitator: Dr. Sadia Khalil Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-004 Topic: Somatosensory cortex Facilitator: Dr. Tooba Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-024, NS-A-025, Topic: Spinal Cord Overview, Spinal Cord Nuclei Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-023 Topic: CN III, IV, VI Facilitator: Dr. Omer Departmental Lab	Pakistan Studies (Theory) Topic: Define Ideology 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 5th September 2025	Physiology (Theory) Code: NS-P-024 Topic: CN V Facilitator: Dr. Waqas Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph008 Topic: Skeletal Muscle Relaxants Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-004 Topic: Somatosensory cortex Facilitator: Dr. Amina Dental Lecture Hall - 1	Anatomy (Practical) Code: NS-A-026 Topic: Spinal Cord Cross-Section Facilitator: Dr. Sarwat Departmental Lab	Physiology (Theory) Code: NS-P-004 Topic: Somatosensory cortex Facilitator: Dr. Tooba Dental Lecture Hall - 1	Jummah Break	Holy Quran (Theory) Topic: Impact of Tawheed Facilitator: MS. Amna Dental Lecture Hall - 1	

Module 5 Timetable								
BDS 1st Year - D24								
Week - 18								
8th September 2025 to 12th September 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 8th September 2025	Physiology (Theory) Code: NS-P-004 Topic: Somatosensory cortex Facilitator: Dr. Amlna Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-009 Topic: Sympathomimetic Drugs Facilitator: Dr Rubina Iqbal Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-027, NS-A-028 Topic: Spinal Cord Gray & White Matter, Ascending Tracts Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-004 Topic: Somatosensory cortex Facilitator: Dr. Hafsa Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-003 Topic: Demyelinating diseases of CNS Facilitator: Dr Nadia salam Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-025 Topic: CN VII Facilitator: Dr. Tahir Departmental Lab	Islamiat (Theory) Topic: Explain Risalat Facilitator: Ms. Amna Dental Lecture Hall - 1
Tuesday 9th September 2025	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr Sadia khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-005 Topic: Pain, Headache, and Thermal Sensations Facilitator: Dr. Nida Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-010 Topic: Alpha Receptor Blocking drugs Facilitator: Dr Rubina Iqbal Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-029, NS-A-030 Topic: Descending Tracts, UMN vs. LMN Lesions Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-005 Topic: Pain, Headache, and Thermal Sensations Facilitator: Dr. Hafsa Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-PA -004,005 Topic: Viruses and herpes simplex virus Facilitator: Dr Majid Dental Lecture Hall - 1	Pakistan Studies (Theory) Topic: Creation of Pakistan Facilitator: Ms. Amna Dental Lecture Hall - 1
Wednesday 10th September 2025	Anatomy (Theory) Code: NS-A-019 Topic: Brainstem Cross Sectional Anatomy Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr Sadia khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-005 Topic: Pain, Headache, and Thermal Sensations Facilitator: Prof. Dr. Sadia Zafar Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-Ph-011 Topic: Beta Receptor Blocking drugs Facilitator: Dr Sidra Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-005 Topic: Pain, Headache, and Thermal Sensations Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	Anatomy (Practical) Code: NS-A-019 Topic: Brainstem CrossSectional Anatomy Facilitator: Dr. Sarwat Departmental Lab	Islamiat (Theory) Topic: Importance of Risalat Facilitator: Ms. Amna Dental Lecture Hall - 1
Thursday 11th September 2025	General Pathology & Microbiology (Theory) Code: NS-pa-006 Topic: Varicella Zoster virus Facilitator: Dr Hira Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-006 Topic: Cortical and Brain Stem Control of Motor Function Facilitator: Dr. Nida Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr Sadia khalil Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-006 Topic: Cortical and Brain Stem Control of Motor Function Facilitator: Dr. Tooba Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-019 Topic: Brainstem Cross Sectional Anatomy Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-025 Topic: CN VII Facilitator: Dr. Shaista Departmental Lab	Pakistan Studies (Theory) Topic: Creation of Pakistan 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 12th September 2025	PRISME (Behavioural Sciences) (Theory) Topic: Ethics & Morals in Dentistry Facilitator: Dr. Naurose Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-012 Topic: Centrally Acting Sympathoplegic Drugs Facilitator: Dr. Fatma Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-007 Topic: Spinal Cord Motor Functions; the cord Reflexes Facilitator: Dr. Nida Dental Lecture Hall - 1	PRISME (Dental Education) (Theory) Topic: Introduction to informatics Facilitator: Dr. Salar Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-007 Topic: Spinal Cord Motor Functions; the cord Reflexes Facilitator: Dr. Tooba Dental Lecture Hall - 1	Jummah Break	Holy Quran (Theory) Topic: Prophethood Facilitator: Ms. Amna Dental Lecture Hall - 1	

Module 5 Timetable

BDS 1st Year - D24

Week - 19
15th September 2025 to 19th September 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 15th September 2025	Physiology (Theory) Code: NS-P-009 Topic: The Limbic System and the Hypothalamus Facilitator: Dr. Amina Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph001 Topic: Sedative/Hypnotics Facilitator: Dr. Iqra Ijaz Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-019 Topic: Brainstem CrossSectional Anatomy Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-008 Topic: Effect of Lesions in the Motor Cortex or in the Corticospinal Pathway Facilitator: Integrated with Medicine, Dr. Humera Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-007 Topic: Polio virus Infection Facilitator: Dr. Hira Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-026 Topic: CN IX, X, XI, XIII Facilitator: Dr. Nida Departmental Lab	Islamiat Topic: Importance of prayer Facilitator: Miss Amna Dental Lecture Hall - 1
Tuesday 16th September 2025	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr. Sadia khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-009 Topic: The Limbic System and the Hypothalamus Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph002 Topic: General Anesthetics Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-019 Topic: Brainstem CrossSectional Anatomy Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-008 Topic: Effect of Lesions in the Motor Cortex or in the Corticospinal Pathway Facilitator: Integrated with Medicine, Dr. Aasim Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-008 Topic: Clostridium tetani & clostridium botulinum Facilitator: Dr. Hira Dental Lecture Hall - 1	Pakistan Studies Topic: History of Pakistan Facilitator: Miss Amna Dental Lecture Hall - 1
Wednesday 17th September 2025	Anatomy (Theory) Code: NS-A-021 Topic: Cerebellar Lobes Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr. Sadia khalil Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-010 Topic: Memory Facilitator: Prof. Dr. Sadia Zafar Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-Ph002 Topic: Local Anesthetics Facilitator: Dr. Fatma Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-011 Topic: The Autonomic Nervous System and the Adrenal Medulla Facilitator: Dr. Nida Dental Lecture Hall - 1	Anatomy (Practical) Code: NS-A-019 Topic: Brainstem Cross Sectional Anatomy Facilitator: Dr. Sarwat Departmental Lab	Islamiat Topic: Importance of prayer Facilitator: Miss Amna Dental Lecture Hall - 1
Thursday 18th September 2025	General Pathology & Microbiology (Tutorial) Code: NS-Pa-001 Topic: Infection of CNS Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-011 Topic: The Autonomic Nervous System and the Adrenal Medulla Facilitator: Dr. Tooba Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmitters Facilitator: Dr. Sadia khalil Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-011 Topic: Cerebral Circulation Facilitator: Dr. Nida Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-022, NS-A-023 Topic: Cerebellar Functions, Cerebellar Clinical Correlates Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-026 Topic: CN IX, X, XI, XIII Facilitator: Dr. Fahad Departmental Lab	Pakistan Studies Topic: History of Pakistan Facilitator: Miss 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 19th September 2025	PRISME (Behavioural Sciences) Topic: Integrity & Respect Facilitator: Dr. Nauseef Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph003 Topic: General Anesthetics Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-013 Topic: Cerebellum and Basal Ganglia Contributions to Overall Motor Control Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	PRISME (Dental Education) Topic: Fundamental Principles & Psychology of Presentation Facilitator: Dr. Safar Arsalan Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-012 Topic: Sleep Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Jummah Break	Holy Quran Topic: Risalat Facilitator: Miss Amna Dental Lecture Hall - 1	

Module 5 Timetable

BDS 1st Year - D24

Week - 20
22nd September 2025 to 26th October 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 22nd September 2025	Physiology (Theory) Code: NS-P-013 Topic: Cerebellum and Basal Ganglia Contributions to Overall Motor Control Facilitator: Integrated with Medicine, Dr. Humera Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-PH-004 Topic: Opioid Analgesics Facilitator: Dr. Rubina iqbal Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-013, NS-A-014 Topic: Brain Regions, Cerebral Cortex Anatomy Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-014 Topic: Contributions to Overall Motor Control Facilitator: Dr. Amina Dental Lecture Hall - 1	General Pathology & Microbiology (Tutorial) Code: NS-Pa-002 Topic: Trauma to CNS Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-022 to NS-P-026 Topic: Cranial Nerves Facilitator: Dr. Beemish Departmental Lab	Islamiat Topic: Importance of Prayer Facilitator: Ms. Amina Dental Lecture Hall - 1
Tuesday 23rd September 2025	Biochemistry (Theory) Code: NS-B-006 Topic: Inherited Disorders of Amino Acid Metabolism Facilitator: Dr. Sadia khaliq Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-014 Topic: Contributions to Overall Motor Control Facilitator: Dr. Nida Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-PH-001 Topic: "Sedative/Hypnotics" Facilitator: Dr. Rubina iqbal Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-015 Topic: Functional Cortex Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-015 Topic: Special Senses, Optics of the eye, Fluid system of the eye-intraocular fluid Facilitator: Dr. Tooba Dental Lecture Hall - 1	General Pathology & Microbiology (Tutorial) Code: NS-Pa-003 Topic: Demyelinating diseases of CNS Facilitator: Demonstrator Dental Lecture Hall - 1	Pakistan Studies Topic: Creation of Pakistan Facilitator: Ms. Amina Dental Lecture Hall - 1
Wednesday 24th September 2025	Anatomy (Theory) Code: NS-A-016 Topic: Cerebral Hemisphere Structure Facilitator: Dr. Kamal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-006 Topic: Inherited Disorders of Amino Acid Metabolism Facilitator: Dr. Sadia khaliq Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-015 Topic: Special Senses, Optics of the eye, Fluid system of the eye-intraocular fluid Facilitator: Prof. Dr. Sadia Zafar Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-PH-001 Topic: "Sedative/Hypnotics" Facilitator: Dr. Sara Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-016 Topic: Central Neurophysiology of Vision Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Anatomy (Practical) Code: NS-A-014 Topic: Cerebral cortex Anatomy Facilitator: Dr. Sarwat Departmental Lab	Islamiat Topic: Importance of Prayer Facilitator: Ms. Amina Dental Lecture Hall - 1
Thursday 25th September 2025	General Pathology & Microbiology (Tutorial) Code: NS-Pa-004 Topic: Viruses Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-016 Topic: Central Neurophysiology of Vision Facilitator: Dr. Amina Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-006 Topic: Inherited Disorders of Amino Acid Metabolism Facilitator: Dr. Sadia khaliq Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-016 Topic: The Sense of hearing Tympanic membrane and their Ossicular system Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-016, NS-A-018 Topic: Cerebral Hemisphere Structure, Internal Capsule Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-027 Topic: Motor System Facilitator: Dr. Omer Departmental Lab	Pakistan Studies Topic: Creation of Pakistan Facilitator: Ms. Amina 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 26th September 2025	PRISME (Behavioural Sciences) Topic: Accountability & Ethical Foundations Facilitator: Dr. Neurose Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-PH-002 Topic: Local Anesthetics Revision Facilitator: Dr. Iqra Ijaz Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-017 Topic: The Sense of hearing Tympanic membrane and their Ossicular system Facilitator: Dr. Nida Dental Lecture Hall - 1	PRISME (Dental Education) Topic: Microsoft Word Fundamentals Facilitator: Dr. Safar Ansalan Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-016 Topic: The Sense of hearing Tympanic membrane and their Ossicular system Facilitator: Dr. Tooba Dental Lecture Hall - 1	Jummah Break	Holy Quran Topic: RISALAT Facilitator: Ms. Amina Dental Lecture Hall - 1	

Module 5 Timetable								
BDS 1st Year - D24								
Week - 21 29th September 2025 to 3rd October 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 29th September 2025	Physiology (Theory) Code: NS-P-018 Topic: Functional anatomy of the cochlea. Auditory nervous pathways Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-P-005 Topic: Anti seizure Drugs Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-039 Topic: Thalamus & Hypothalamus Connections, Hypophyseal Portal System, Thalamic & Hypothalamic Clinical Correlates Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-018 Topic: Functional anatomy of the cochlea. Auditory nervous pathways Facilitator: Dr. Amina Rizvi Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-005 Topic: Herpes Simplex Virus Infection Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-027 Topic: Motor System Facilitator: Dr. Waqas Departmental Lab	Islamiat Topic: Prayer Facilitator: Ms. Amna Dental Lecture Hall - 1
Tuesday 30th September 2025	Biochemistry (Theory) Code: NS-B-002 Topic: Glutamine Metabolism Facilitator: Prof. Dr. Sadia Amir Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-018 Topic: Functional anatomy of the cochlea. Auditory nervous pathways Facilitator: Dr. Nida Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-P-005 Topic: Anti seizure Drugs Facilitator: Dr. Rubina Iqbal Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-039 Topic: Thalamus & Hypothalamus Connections, Hypophyseal Portal System, Thalamic & Hypothalamic Clinical Correlates Facilitator: Prof. Dr. Nahid Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Prof. Dr. Sadia Zafar Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-006 Topic: Varicella Zoster Virus Infection Facilitator: Demonstrator Dental Lecture Hall - 1	Pakistan Studies Topic: Explain the Ethnic Facilitator: Ms. Amna Dental Lecture Hall - 1
Wednesday 1st October 2025	Anatomy (Theory) Code: NS-A-036, NS-A-031 Topic: Brain Blood Supply, Circle of Willis Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-003 Topic: Hyperammonemia Facilitator: Prof. Dr. Sadia Amir Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Dr. Nida Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-P-005 Topic: Anti seizure Drugs Facilitator: Dr. Sidra Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Dr. Tooba Dental Lecture Hall - 1	PRISME (Behavioural Sciences) Topic: Facilitator: Dental Lecture Hall - 1	Islamiat Topic: Prayer Facilitator: Ms. Amna Dental Lecture Hall - 1
Thursday 2nd October 2025	General Pathology & Microbiology (Theory) Code: NS-Pa-007 Topic: Polio Virus Infection Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-003 Topic: Hyperammonemia Facilitator: Prof. Dr. Sadia Amir Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-032, NS-A-033, NS-A-034 Topic: Dural Venous Sinuses, Cavernous Sinus Intracranial Hemorrhages Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-028 Topic: Deep Reflexes Facilitator: Dr. Shaista Departmental Lab	Pakistan Studies Topic: Explain the Ethnic 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 3rd October 2025	PRISME (Community Dentistry) Topic: Introduction to Research, Types of Research & Research Cycle Facilitator: Dr. Lubna Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Dr. Amina Dental Lecture Hall - 1	PRISME (Dental Education) Topic: Research Facilitator: Dr. Salar Arsalan Dental Lecture Hall - 1	PRISME (Dental Education) Topic: Ethics Facilitator: Dr. Salar Arsalan Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-019 Topic: The Chemical Senses- Taste and Smell Facilitator: Dr. Tooba Dental Lecture Hall - 1	Jummah Break	Holy Quran Topic: BELIEF IN HERE AFTER Facilitator: Ms. Amna Dental Lecture Hall - 1	

Module 5 Timetable

BDS 1st Year - D24

Week - 22
6th October 2025 to 10th October 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 6th October 2025	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Dr. Hafsa Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-007 Topic: Cholinergic Drugs (agonists) revision Facilitator: Dr. Iqra Ijaz Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-037, NS-A-038 Topic: Reticular System, Thalamus & Hypothalamus Overview Facilitator: Prof. Dr Nahid Dental Lecture Hall - 1	Break	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Dr. Tooba Dental Lecture Hall - 1	General Pathology & Microbiology (Theory) Code: NS-Pa-008 Topic: Clostridium Tetani Infection Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-029 Topic: Hypothalamus Facilitator: Dr. Nida Departmental Lab	Islamiat Topic: Akhrat Facilitator: Ms. Amna Dental Lecture Hall - 1
Tuesday 7th October 2025	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmit ters Facilitator: Prof Dr Sadia Amir Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-001 Topic: Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters Facilitator: Prof. Dr. Shahina Dental Lecture Hall - 1	Pharmacology (Theory) Code: NS-Ph-007 Topic: Cholinergic Drugs (antagonists) revision Facilitator: Dr Rubina Iqbal Dental Lecture Hall - 1	Break	Anatomy (Theory) Code: NS-A-017, NS-A-035 Topic: Ventricular System, CSF Physiology Facilitator: Prof. Dr Nahid Dental Lecture Hall - 1	PRISME (Dental Education) Topic: Stress copy Mechanism Facilitator: Dr Salar Arsalan Dental Lecture Hall - 1	PRISME (Community Dentistry) Topic: Introduction to Research Facilitator: Dr Lubna Dental Lecture Hall - 1	Pakistan Studies Topic: Role of Sir Syed Ahmed for Pakistan Facilitator: Ms. Amna Dental Lecture Hall - 1
Wednesday 8th October 2025	Anatomy (Theory) Code: NS-A-020 Topic: Cranial Nerve Nuclei and Pathways Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmit ters Facilitator: Prof Dr Sadia Amir Dental Lecture Hall - 1	PRISME (Behavioural Sciences) Topic: Introduction to Social Responsibility Facilitator: Dr. Naurose Dental Lecture Hall - 1	Break	Pharmacology (Theory) Code: NS-Ph-008 Topic: Skeletal Muscle Relaxants Facilitator: Dr. Fatma Dental Lecture Hall - 1	PRISME (Community Dentistry) Topic: Types of Research Facilitator: Dr Lubna Dental Lecture Hall - 1	PRISME (Dental Education) Topic: (Career Pathways) Goal Development Facilitator: Dr Salar Arsalan Dental Lecture Hall - 1	Islamiat Topic: Akhrat Facilitator: Ms. Amna Dental Lecture Hall - 1
Thursday 9th October 2025	General Pathology & Microbiology (Theory) Code: NS-Pa-008 Topic: Clostridium Botulinum Facilitator: Demonstrator Dental Lecture Hall - 1	Physiology (Theory) Code: NS-P-003 Topic: Sensory Receptors, Transduction of sensory stimuli into nerve impulses Facilitator: Dr. Nida Dental Lecture Hall - 1	Biochemistry (Theory) Code: NS-B-005 Topic: Neurotransmit ters Facilitator: Prof Dr Sadia Amir Dental Lecture Hall - 1	Break	PRISME (Dental Education) Topic: Dress Code Facilitator: Dr Salar Arsalan Dental Lecture Hall - 1	Anatomy (Theory) Code: NS-A-020 Topic: Cranial Nerve Nuclei and Pathways Facilitator: Dr. Kanwal Dental Lecture Hall - 1	Physiology (Practical) Code: NS-P-022 to NS-P-029 Topic: Motor System, Cranial Nerves, Sensory System, Deep Reflexes, Hypothalamus Facilitator: Dr. Fahad Departmental Lab	Pakistan Studies Topic: Muslim league 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 10th October 2025	Assessment Slot	Assessment Slot	Assessment Slot	Assessment Slot	PRISME (Behavioural Sciences) Topic: Cultural Identity, Norms, and Beliefs in Oral Health Facilitator: Dr. Naurose Dental Lecture Hall - 1	Jummah Break	Holy Quran Topic: Prayer Facilitator: Ms. Amna Dental Lecture Hall - 1	
Module Exam 9								

Allocation of Hours

1st Year BDS - D24

Block 2 - Module 5

Sr.	Subjects	Theory Hours	Practical Hours	Total Hours
1	Physiology	55	13	68
2	Anatomy	25	4	29
3	Biochemistry	18	0	18
4	Pharmacology	22	0	22
5	General Pathology & Microbiology	17	0	17
TOTAL		137	17	154

Modular Outcomes

Module Name	Modular Outcomes
Block 2 Module 5 Neurosciences I	<ul style="list-style-type: none">• Describe the neuroanatomy, histology and microscopic anatomy of the central nervous system Discuss the physiological mechanism of Autonomic Nervous System (ANS), motor and sensory System.• Explain the underlying pathophysiological mechanisms of common neurological conditions Describe the pharmacological principles underlying the management of common neurological conditions

Learning Objectives

Session	Section/ class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/Tuto rial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Durati on	Reference	Facilitator
2024-2025		17	Anatomy	1	1	Theory (Lecture)	Nervous System Overview, Neuron, Neuron Classification,	NS-A-001, NS-A-002, NS-A-003	Briefly describe general organization of nervous system. Define neuron and describe its structure Neuron Classify neurons morphologically and functionally with examples	1	General Anatomy By Laiq Hussain Siddiqui 5th Edition	Dr. Kanwal
2024-2025		17	Anatomy	1	2	Theory (Lecture)	Sympathetic vs. Parasympathet ic System	NS-A-008	Describe the major subdivisions of ANS into sympathetic and parasympathetic nervous system with comparison of anatomical differences.	1	General Anatomy By Laiq Hussain Siddiqui 5th Edition	Prof. Dr. Nahid
2024-2025		17	Anatomy	1	3	Theory (Lecture)	CNS & PNS Overview, Neuroglia, Receptors and Effectors, Receptor Classification	NS-A-004,N S-A-005, NS-A-006, NS-A-007	Briefly describe components of central and peripheral nervous system Describe the supporting cells in central and peripheral nervous system Define receptors and effectors Describe classification of receptors	1	General Anatomy By Laiq Hussain Siddiqui 5th Edition	Dr. Kanwal

2024-20 25		17	Anatomy	1	4	Theory	Cranial Nerves Overview, Cranial Nerve Functions, Spinal Nerve Anatomy, Dermatome	NS-A-009 , NS-A-010 , NS-A-011 , NS-A-012	Describe the structural and functional features of cranial nerves. Enlist all cranial nerves and describe their functions Explain the classification, structure, and functions of peripheral nerve fibers in a typical spinal nerve. Define dermatome	1	General Anatomy By Laiq Hussain Siddiqui 5th Edition	Prof. Dr. Nahid
2024-20 25		17	Anatomy	1	5	Theory	Spinal Cord Overview, Spinal Cord Nuclei	NS-A-024 , NS-A-025 ,	Identify the location, extent, coverings, and blood supply of spinal cord Discuss & tabulate nuclear organization at different levels of spinal cord	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-20 25		17	Anatomy	1	6	Practical	Spinal Cord Cross-Section	NS-A-026	Describe, draw & label the transverse section of spinal cord at mid cervical level showing ascending & descending tracts	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Sarwat

2024-20 25		17	Physiology	1	1	Theory (Lecture/ Tutorial)	Organizatio n of the Nervous System, Basic functions of Synapses, and Neurotrans mitters	NS-P-001	Describe the general organization of nervous system, Classify synapse and explain the physiological anatomy of chemical synapse. Elaborate the role of synapse in processing information	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-20 25		17	Physiology	1	2	Theory (Lecture/ Tutorial)	Organizatio n of the Nervous System, Basic functions of Synapses, and Neurotrans mitters	NS-P-001	Classify the substances that act as neurotransmitters or synaptic transmitters. Enlist functions related to dentistry of each group.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-20 25		17	Physiology	1	3	Theory (Lecture/ Tutorial)	Organizatio n of the Nervous System, Basic functions of Synapses, and Neurotrans mitters	NS-P-001	Define Excitatory and inhibitory postsynaptic potential and explain their mechanism of generation	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida

2024-20 25		17	Physiology	1	4	Theory (Lecture/ Tutorial)	Organiza tion of the Nervous System, Basic functions of Synapses, and Neurotrans mitters	NS-P-001	Explain spatial and temporal summation. Explain the mechanism of synaptic fatigue (its significance and synaptic delay	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-20 25		17	Physiology	1	5	Theory (Lecture/ Tutorial)	Organiza tion of the Nervous System, Basic functions of Synapses, and Neurotransm itters	NS-P-001	Discuss the effects of hypoxia, acidosis and alkalosis on synaptic transmission	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-20 25		17	Physiology	1	6	Theory (Lecture/ Tutorial)	Sensory receptors, neuronal circuits for processing information	NS-P-002	Define and classify the sensory receptors in the body on the basis of stimuli they detect. Discuss tonic and phasic receptors with 2 to 3 examples of each	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-20 25		17	Physiology	1	7	Theory (Lecture/ Tutorial)	Sensory Receptors, Transductio n of sensory stimuli into nerve impulses	NS-P-003	Classify the nerve fibers on the basis of diameter and speed of conduction.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa

2024-2025		17	Physiology	1	8	Theory (Lecture/Tutorial)	Somatosensory cortex	NS-P-004	Classify somatic sensations. Explain two main ascending pathways (DCML and Anterolateral system) for transmitting sensation to CNS	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		17	Physiology	1	9	Theory (Lecture/Tutorial)	Somatosensory cortex	NS-P-004	Enlist sensations carried by dorsal column medial Lemniscal system and Anterolateral Pathway with special reference to Trigeminal sensory system.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		17	Physiology	1	1	Practical	Sensory system	NS-P-022	Examination of Olfactory nerve	1	Zafar Manual of Physiology Vol 2	Dr. Beenish
2024-2025		17	Physiology	1	2	Practical	CN III, IV, VI	NS-P-023	Examination of 3rd, 4th and 6th Nerve	1	Zafar Manual of Physiology Vol 2	Dr. Omer
2024-2025		17	Pharmacology	1	1	Theory (Lecture)	Introduction to ANS	NS-Ph006	Enlist types and sub types of various ANS receptors along with their locations in different structures and organ systems of the body .Describe the synthesis, storage, release and degradation of the neuro-transmitters of the ANS Explain the negative and positive feedback controls of neurotransmitter release	1	Lippincotts Pharmacology 8th edition	Dr Rubina Iqbal

2024-20 25		17	Pharmacology	1	2	Theory (Lecture)	Cholinergic Drugs (agonists)	NS-Ph-00 7	<p>Classify cholinomimetics according to chemistry & mechanism of action.</p> <p>Describe actions of acetylcholine on different organ systems of the body.</p> <p>Enumerate the adverse effects of acetylcholine & cholinergic drugs</p> <p>Cholinergic Drugs (agonists)</p> <p>Explain the salient pharmacological properties of cholinesterases with their appropriate clinical uses.</p> <p>Differentiate between cholinergic and myasthenic crisis</p> <p>Describe the management of myasthenia gravis.</p> <p>Explain the role of Pilocarpine in glaucoma</p> <p>Enumerate the signs and symptoms of organophosphate poisoning due to cholinergic excess.</p> <p>Enlist steps in the management of organophosphate Compound (OPC) poisoning</p> <p>Describe aging and role of oximes in the management.</p> <p>Explain the prevention of OPC poisoning</p>	1	Lippincott's Pharmacology 8th edition	Dr Iqra Ijaz
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2024-20 25		17	Pharmacology	1	3	Theory (Tutorial)	Cholinergic Drugs (antagonists)	NS-Ph-00 7	Classify anti-cholinergic drugs (on the basis of therapeutic uses) Describe pharmacological actions of atropine Differentiate between atropine and hyoscine Enlist therapeutic uses of atropine Enumerate adverse effects of anti-cholinergic drugs	1	Lippincott's Pharmacology 8th edition	Dr Sara
2024-20 25		17	Biochemistry	1	1	Theory (Lecture/ Tutorial)	Glutamine Metabolism	NS-B-002	Briefly describe the metabolism & importance of glutamine in human body	1	Lippicott 9th edition	Dr Sadia Khalil
2024-20 25		17	Biochemistry	1	2	Theory (Lecture/ Tutorial)	Hyperammo n emia	NS-B-003	Enlist inherited & acquired causes of hyperammonemia. Describe the effects of hyperammonemia on the brain. Outline the management options for hyperammonemia.	1	Lippicott 9th edition	Dr Sadia Khalil
2024-20 25		17	Biochemistry	1	3	Theory (Lecture/ Tutorial)	Hyperammo n emia	NS-B-003	Enlist inherited & acquired causes of hyperammonemia. Describe the effects of hyperammonemia on the brain. Outline the management options for hyperammonemia.	1	Lippicott 9th edition	Dr Sadia Khalil

2024-20 25		17	General Pathology & Microbiology	1	1	Lecture	Infections of CNS	NS-Pa-00 1	Meningitis types and etiology	1	Robbins 11th edition	Dr Nadia salam
2024-20 25		17	General Pathology & Microbiology	1	2	Theory (Lecture	Trauma to CNS	NS-Pa-00 2	Define concussion and contusion and clinical feature	1	Robbins 11th edition	Dr Nadia salam
2024-20 25		17	General Pathology & Microbiology	1	3	Theory Lecture	Demyelinati ng disease of CNS	NS-Pa-00 3	Various demyelinating diseases	1	Robbins 11th edition	Dr Nadia salam
2024-20 25		17	Physiology	1	1	Practical	CN V	NS-P-024	Examination of the trigeminal nerve	1	Zafar Manual of Physiology Vol 2	Dr. Waqas
2024-20 25		17	Pharmacology	1	1	Lecture	Skeletal Muscle Relaxants	NS-Ph00 8	Classify skeletal muscle relaxants according to their mechanism of action. Describe mechanism of action and adverse effects of non-depolarizing skeletal muscle relaxants Skeletal Muscle Relaxants Describe mechanism of action and adverse effects of depolarizing skeletal muscle relaxants. Enumerate therapeutic uses of peripherally acting skeletal muscle relaxants. Define and give pharmacological basis and treatment of malignant hyperthermia	1	Lippincott's Pharmacology	Dr Rubina Iqbal

2024-20 25		17	Physiology	1	1	Lecture	Somatosensory cortex	NS-P-004	Trace DCML and Anterolateral pathways from receptors to sensory cortex and compare their features.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-20 25		17	Holy Quran	1	1	Theory (Lecture/Tutorial)	impact of tawheed		tawheed in human life	1	notes	MS. Amna
2024-20 25		17	Islamiyat	1	1	Theory (Lecture/Tutorial)	importance of prayer		prayer in human life	1	notes	Ms Amna
2024-20 25		17	Islamiyat	1	2	Theory (Lecture/Tutorial)	Importance of prayer		building personal character	1	notes	Amna
2024-20 25		17	Pak Studies	1	1	Theory (Lecture/Tutorial)	define ideology		ideology of pakistan	1	notes	Ms Amna
2024-20 25		17	Pak Studies	1	2	Theory (Lecture/Tutorial)	define ideology		basic points	1	notes	Ms Amna

Session	Section / class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/Tutorial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2025		18	Anatomy	1	1	Theory (Lecture)	Spinal Cord Gray & White Matter, Ascending Tracts	NS-A-027, NS-A-028	Elaborate the cross-sectional details of white and gray matter of cervical and thoracic segments of spinal cord Tabulate the sensory nerve endings, and anatomical sites of first, second, third order neurons of ascending tracts	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr. Nahid
2024-2025		18	Anatomy	1	2	Theory (Lecture)	Descending Tracts, UMN vs. LMN Lesions	NS-A-029, NS-A-030	Tabulate first, second, third order neurons of descending tracts Differentiate clearly between upper and lower motor neuron lesions	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr. Nahid
2024-2025		18	Anatomy	1	3	Theory (Lecture)	Brainstem Cross Sectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the medulla, highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-2025		18	Anatomy	1	4	Theory (Lecture)	Brainstem Cross Sectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the medulla, highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr. Nahid
2024-2025		18	Anatomy	1	1	Practical	Brainstem Cross Sectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the medulla, highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Sarwat

2024-2025		18	Physiology	1	1	Theory (Lecture/Tutorial)	Somatosensory cortex	NS-P-004	Give location and functions of Primary Somesthetic area and sensory association area of sensory cortex. Name the sensations perceived by these areas.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-2025		18	Physiology	1	2	Theory (Lecture/Tutorial)	Somatosensory cortex	NS-P-004	Describe the sensations lost when there is damage to somesthetic areas. Discuss representation of body parts in the sensory cortex.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		18	Physiology	1	3	Theory (Lecture/Tutorial)	Pain, Headache, and Thermal Sensations	NS-P-005	Classify pain. Discuss location and stimulation of pain receptors	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		18	Physiology	1	4	Theory (Lecture/Tutorial)	Pain, Headache, and Thermal Sensations	NS-P-005	Discuss dual pain pathway of spinal cord and brain for transmission of pain signals into CNS with special reference to tooth pain. Compare the features of dual pain pathways.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		18	Physiology	1	5	Theory (Lecture/Tutorial)	Pain, Headache, and Thermal Sensations	NS-P-005	Explain Analgesia system/pain suppression system of brain and spinal cord. Discuss its significance	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Sadia Zafar
2024-2025		18	Physiology	1	6	Theory (Lecture/Tutorial)	Pain, Headache, and Thermal Sensations	NS-P-005	Define and give the physiological basis of referred pain with two examples. Define Trigeminal Neuralgia and describe its clinical features, basic causes, and dental relevance.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-2025		18	Physiology	1	7	Theory (Lecture/Tutorial)	Cortical and Brain Stem Control of Motor Function	NS-P-006	Name the motor areas of the cerebral cortex and give representation of body parts. Discuss the functions of motor areas.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		18	Physiology	1	8	Theory (Lecture/Tutorial)	Cortical and Brain Stem Control of Motor Function	NS-P-006	Enlist the functions of the brain stem. Name the descending motor tracts. Describe the functions of the corticospinal tract.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba

2024-2025		18	Physiology	1	9	Theory (Lecture/Tutorial)	Spinal Cord Motor Functions; the cord Reflexes	NS-P-007	Give Functional organization of spinal cord. Define motor unit.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		18	Physiology	1	1	Practical	CN VII	NS-P-025	Examination of facial nerve	1	Zafar Manual of Physiology Vol 2	Dr. Tahir
2024-2025		18	Physiology	1	2	Practical	CN VII	NS-P-025	Examination of facial nerve	1	Zafar Manual of Physiology Vol 2	Dr. Shaista
2024-2025		18	Pharmacology	1	1	Theory (Lecture)	Sympathomimetic Drugs	NS-Ph 009	Enumerate important adverse effects & contraindications of the drug. Explain the differences in response, therapeutic uses & side-effects of other catecholamines with reference to adrenaline Differentiate between catecholamines and non catecholamines Explain the pharmacological actions of important non catecholamines in light of their mode of action Enlist important therapeutic uses and side-effects of important non-catecholamines. Classify sympathomimetics according to their clinical indications	1	Lippincott's Pharmacology	Dr Rubina Iqbal
2024-2025		18	Pharmacology	1	2	Theory (Lecture)	Alpha Receptor Blocking drugs	NS-Ph 010	Classify alpha blockers according to receptor selectivity. Explain the pharmacological actions of alpha blockers Alpha Receptor Blocking drugs Enlist and important clinical uses and side-effects of this drug group. Describe their role in benign prostatic hyperplasia & pheochromocytoma	1	Lippincott's Pharmacology	Dr Rubina Iqbal

2024-2025		18	Pharmacology	1	3	Theory (Tutorial)	Beta Receptor Blocking drugs	NS-Ph 011	Classify beta blockers according to receptor selectivity, ISA, MSA, lipid solubility & duration of action. Describe the pharmacological actions of beta blockers on different systems of the body. Beta Receptor Blocking drugs Explain important pharmacokinetic features of the group	1	Lippincotts Pharmacology	Dr Sidra
2024-2025		18	Biochemistry	1	1	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Explain the biosynthesis, mechanism of action, and physiological role of acetylcholine, and discuss the clinical consequences of its deficiency	1	Lipincott 9th edition	Dr Sadia khalil
2024-2025		18	Biochemistry	1	2	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Explain the biosynthesis, mechanism of action, and physiological role of acetylcholine, and discuss the clinical consequences of its deficiency	1	Lipincott 9th edition	Dr Sadia khalil
2024-2025		18	Biochemistry	1	3	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Outline the reactions involved in biosynthesis of catecholamines.	1	Lipincott 9th edition	Dr Sadia khalil
2024-2025		18	General Pathology & Microbiology	1	1	Theory Lecture	Demyelinating diseases of CNS	NS-Pa-003	Clinical features of multiple sclerosis & Guillain Barre syndrome	1	Robbins 11th edition	Dr Nadia salam
2024-2025		18	General Pathology & Microbiology	1	2	Theory Lecture	Viruses and herpes simplex virus	NS-PA -004,005	Introduction of virus ,classification of RNA & DNA .Discuss Herpes simplex	1	Livenson 19th edition	Dr Majid
2024-2025		18	General Pathology & Microbiology	1	3	Theory Lecture	Varicella Zoster virus	NS-pa-006	Varicella zoster virus with epidemiology , pathogenesis ,lab diagnosis	1	Livenson 19th edition	Dr Hira

2024-2025		18	PRISME (Behavioral Sciences)	1	1	Theory Lecture	Ethics & Morals in Dentistry		Understand and describe ethical codes (GDC, ADA, PM&DC)	1		Dr. Naurose
2024-2025		18	Physiology	1	1	Lecture	Spinal Cord Motor Functions; the cord Reflexes	NS-P-007	Define reflex action and identify the components of a reflex arc. Define, classify and enlist components of stretch reflex with special reference to jaw reflex)	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		18	Pharmacology	1	1	Tutorial	Centrally Acting Sympathoplegic Drugs	NS-Ph 012	Name central Sympathoplegics and centrally acting alpha-2 agonists. Explain mechanism of action, uses and side effects of alpha methyl Dopa & clonidine Differentiate between alpha methyl Dopa & clonidine	1	Lippincotts review	Dr Fatma
2024-2025		18	PRISME (Dental Education)	1	1	Lecture	Introduction to informatics		Define informatics and differentiate it from IT, data science and computer science Introduction to Informatics Describe the data-information-knowledge-wisdom (DIKW) hierarchy using dental examples Explain how informatics supports evidence based practice and patient-centered care in dentistry Generate and interpret a basic frequency report (e.g., count of missing teeth) on DIKW hierarchy on Word Document with proper formatting of the draft.	1		Dr. Salar
2024-2025		18	Holy Quran	1	1	Theory (Lecture/Tutorial)	Prophethood		risalat	1	notes	Amna
2024-2025		18	Islamiyat	1	1	Theory (Lecture/Tutorial)	explain risalat		significance of risalat	1	notes	Amna

2024-20 25		18	Islamiyat	1	2	Theory (Lecture/ Tutorial)	importance of risalat		risalat with quran ayyat	1	notes	amna
2024-20 25		18	Pak Studies	1	1	Theory (Lecture/ Tutorial)	creation of Pakistan		basis of creation of Pakistan	1	notes	amna
2024-20 25		18	Pak Studies	1	2	Theory (Lecture/ Tutorial)	creation of Pakistan		importance of basis of Pakistan	1	notes	Amna

Session	Section / class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/Tutorial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2025		19	Anatomy	1	1	Theory (Lecture/Tutorial)	Brainstem CrossSectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the pons highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr. Nahid
2024-2025		19	Anatomy	1	2	Theory (Lecture/Tutorial)	Brainstem CrossSectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the midbrain highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr. Nahid
2024-2025		19	Anatomy	1	3	Theory (Lecture/Tutorial)	Cerebellar Lobes	NS-A-021	Identify the lobes of cerebellum	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-2025		19	Anatomy	1	4	Theory (Lecture/Tutorial)	Cerebellar Functions, Cerebellar Clinical Correlates	NS-A-022, NS-A-023	Discuss the functional classification of cerebellum Define important clinical correlates, vermis syndrome, ataxia, dysarthria, dysdiadochokinesia, nystagmus, and vertigo.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal

2024-2025		19	Anatomy	1	1	Practical	Brainstem Cross Sectional Anatomy	NS-A-019	Label, and identify the key structures in cross-sectional anatomy of the brainstem at the levels of the midbrain, pons, and medulla, highlighting the distribution of grey and white matter.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Sarwat
2024-2025		19	Physiology	1	1	Theory (Lecture/Tutorial)	The Limbic System and the Hypothalamus	NS-P-009	Enlist the components of limbic system and its general functions.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-2025		19	Physiology	1	2	Theory (Lecture/Tutorial)	Effect of Lesions in the Motor Cortex or in the Corticospinal Pathway	NS-P-008	Explain the features of upper motor neuron lesion. Explain the features of lower motor neuron lesions.	1		Integrated with Medicine. Dr. Humera
2024-2025		19	Physiology	1	3	Theory (Lecture/Tutorial)	The Limbic System and the Hypothalamus	NS-P-009	Enlist the functions of different portions hypothalamus. Explain the physiological basis and features of Alzheimer's disease.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		19	Physiology	1	4	Theory (Lecture/Tutorial)	Effect of Lesions in the Motor Cortex or in the Corticospinal Pathway	NS-P-008	Define and give types of cerebrovascular accident along with their salient features	1	Guyton and Hall Textbook of Physiology 14th Edition	Integrated with Medicine. Dr. Aasim

2024-2025		19	Physiology	1	5	Theory (Lecture/Tutorial)	Memory	NS-P-010	Define memory. Classify memory on the basis of duration and information stored. Define retrograde and anterograde amnesia.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Sadia Zafar
2024-2025		19	Physiology	1	6	Theory (Lecture/Tutorial)	The Autonomic Nervous System and the Adrenal Medulla	NS-P-011	Explain the effects of sympathetic and parasympathetic on various organs/system of body.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		19	Physiology	1	7	Theory (Lecture/Tutorial)	The Autonomic Nervous System and the Adrenal Medulla	NS-P-011	Enlist types of autonomic receptors present in heart, blood vessels, smooth muscles, GIT & EYE. Give features of Alarm or stress response.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		19	Physiology	1	8	Theory (Lecture/Tutorial)	Cerebral Circulation	NS-P-011	Enlist the functions of CSF. Define hydrocephalus	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		19	Physiology	1	9	Theory (Lecture/Tutorial)	Sleep	NS-P-012	Give types and features of sleep. Also mention the neurotransmitters involved in sleep.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		19	Physiology	1	1	Practical	CN IX, X, XI, XIII	NS-P-026	Examination of 9th and 10th nerve	1	Zafar Manual of Physiology Vol 2	Dr. Nida
2024-2025		19	Physiology	1	2	Practical	CN IX, X, XI, XIII	NS-P-026	Examination of 11th and 12th Nerve	1	Zafar Manual of Physiology Vol 2	Dr. Fahad

2024-2025		19	Pharmacology	1	1	Theory (Lecture)	Sedative/Hypnotics	NS-Ph001	Classify sedative-hypnotics Illustrate GABAA receptor-chloride ion channel macromolecular Complex and identify site of action of various sedative hypnotics Pharmacology & Therapeutics Sedative/Hypnotics List their clinical uses and adverse Effects Outline the management of overdose of sedative hypnotics Compare BZD, barbiturates; and BZD, Buspirone Identify the distinctive properties of buspirone, eszopiclone, ramelteon, zaleplon, zolpidem and suvorexant	1	Lippincott's review pharmacology	Dr Iqra Ijaz
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2024-2025		19	Pharmacology	1	2	Theory (Lecture)	General Anesthetics	NS-Ph002	<p>Name the major inhalation and intravenous aLocal Anesthetic</p> <p>Explain the relationship among tissue pH, drug pKa, and the rate of onset of local anesthetic action</p> <p>Discuss 4 factors that determine the susceptibility of nerve fibers to local anesthetic blockade</p> <p>Describe the major toxic effects of the local anesthetics</p> <p>Explain how hyperkalemia facilitates the cardiac toxicity of local anesthetics</p>	1	Lippincotts review pharmacology	Dr Rubina iqbal
2024-2025		19	Pharmacology	1	3	Theory (Tutorial)	Local Anesthetics	NS-Ph002	<p>Classify local anesthetics</p> <p>Describe their mechanism of action</p> <p>Outline various methods of giving local anesthesia</p> <p>Local Anesthetics</p> <p>Explain the relationship among tissue pH, drug pKa, and the rate of onset of local anesthetic action</p> <p>Discuss 4 factors that determine the susceptibility of nerve fibers to local anesthetic blockade</p> <p>Describe the major toxic effects of the local anesthetics</p> <p>Explain how hyperkalemia facilitates the cardiac toxicity of local anesthetics</p>	1	Lippincotts review pharmacology	Dr Fatma

2024-2025		19	Biochemistry	1	1	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Elaborate the mechanism of action of catecholamines. Give the cause & management of Parkinson disease.	1	Lippincott 9th edition	Dr Sadia khalil
2024-2025		19	Biochemistry	1	2	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Describe the synthesis & biochemical importance of serotonin, melatonin & GABA	1	Lippincott 9th edition	Dr Sadia khalil
2024-2025		19	Biochemistry	1	3	Theory (Lecture/Tutorial)	Neurotransmitters	NS-B-005	Describe the synthesis & biochemical importance of serotonin, melatonin & GABA	1	Lippincott 9th edition	Dr Sadia khalil
2024-2025		19	General Pathology & Microbiology	1	1	Theory Lecture	Polio virus infection	Ns-Pa-007	Discuss polio virus with its pathogenesis, lab diagnosis, prevention	1	Livenson 19th edition	Dr Hira
2024-2025		19	General Pathology & Microbiology	1	2	Theory Lecture	Clostridium tetani & clostridium botulinum	NS-Pa-008	Discuss clostridium tetani and botulinum	1	Livenson 19th edition	Dr Hira
2024-2025		19	General Pathology & Microbiology	1	3	Tutorial	Infection of CNS	NS-Pa-001	Define meningitis	1	Robins 11th Edition	Demonstrator
2024-2025		19	PRISME (Behavioural Sciences)	1	1	Lecture	Integrity & Respect		Demonstrates academic honesty and respectful conduct	1		Dr. Naurose

2024-2025		19	Pharmacology	1	1	Lecture	General Anesthetics	NS-Ph003	<p>"Name the major inhalation and intravenous anesthetic drugs. General Anesthetics Define the terms blood:gas partition coefficient and minimum alveolar concentration (MAC), and explain their significance in the pharmacology of inhalational anesthetics. 108 Enlist the molecular targets of action of anesthetic drugs and describe their associated toxicities. List main pharmacokinetic characteristics of commonly used intravenous and inhaled anesthetic agents. "</p>	1	Lippincotts review pharmacology	Dr Rubina iqbal
2024-2025		19	Physiology	1	1	Lecture	Cerebellum and Basal Ganglia Contributions to Overall Motor Control	NS-P-013	Give functional divisions of cerebellum along with their functions.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina

2024-2025	19	PRISME (Dental Education)	1	1	Lecture + Practical	Fundamental Principles & Psychology of Presentation	<p>Explain cognitive-load limit and recognise atleast three cognitive-load pitfalls in slide design (extraneous text, visual clutter, distracting animations).</p> <p>List and explain the core design rules for slide decks</p> <ol style="list-style-type: none">1. 6 × 6 Rule2. One Idea per Slide3. High Contrast4. Readable Fonts5. Consistent Visual Hierarchy6. Balanced Whitespace7. Quality Imagery over Text8. Colour-Blind–Safe Palette9. Minimal Animation10. Accessible Content <p>Describe the psychological principles that affect legibility, including appropriate font size, dyslexia friendly typefaces, and optimal line spacing.</p> <p>Explain how colour psychology influences audience attention, emotion, and memory during a presentation.</p> <p>Outline and illustrate the multimedia-learning principles of dual coding, signalling, and segmenting as methods for turning a cluttered slide into an audience friendly format</p>	1	Dr. Salar Arsalan	40
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									<p>Transform one “busy” slide from the PDF into a compliant version that integrates key design rules, colour codes, layout grid, accessibility, and multimedia-learning principle and Run MS Accessibility Checker and correct critical errors.</p> <p>Design and present on any topic related to the subjects being taught that integrates key design rules, accessibility, and multimedia learning principle.</p> <p>Critique a peer’s slide deck for adherence to accessibility standards and provide constructive feedback.</p>			
2024-2025		19	Holy Quran	1	1	Theory (Lecture/Tutorial)	Risalat		identify the prophet as role model	1	notes	amna
2024-2025		19	Islamiyat	1	1	Theory (Lecture/Tutorial)	Importance of prayer		perseverance & punctuality	1	notes	amna
2024-2025		19	Islamiyat	1	2	Theory (Lecture/Tutorial)	importance of prayer		self & social discipline	1	notes	amna
2024-2025		19	Pak Studies	1	1	Theory (Lecture/Tutorial)	History of Pakistan		define	1	notes	amna
2024-2025		19	Pak Studies	1	2	Theory (Lecture/Tutorial)	history of pakistan		basic points in History	1	notes	amna

Session	Section/ class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/T utorial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2 025		20	Anatomy	1	1	Theory (Lecture)	Brain Regions, Cerebral Cortex Anatomy	NS-A-01 3, NS-A-01 4	Enlist the parts of the brain. Identify the lobes, sulci & gyri and cortical areas of cerebrum	1	Snell`s Clinical Neuroanato my Eighth Edition	Prof. Dr. Nahid
2024-2 025		20	Anatomy	1	2	Theory (Lecture)	Functional Cortex	NS-A-01 5	Describe functional areas of cerebrum Function	1	Snell`s Clinical Neuroanato my Eighth Edition	Prof. Dr. Nahid
2024-2 025		20	Anatomy	1	3	Theory (Lecture)	Cerebral Hemisphere Structure	NS-A-01 6	Describe internal structure of cerebral hemisphere (basal ganglia)	1	Snell`s Clinical Neuroanato my Eighth Edition	Dr. Kanwal
2024-2 025		20	Anatomy	1	4	Theory (Lecture)	Cerebral Hemisphere Structure, Internal Capsule	NS-A-01 6, NS-A-01 8	Describe internal structure of cerebral hemisphere (white matter) Describe various parts of internal capsule	1	Snell`s Clinical Neuroanato my Eighth Edition	Prof. Dr. Nahid

2024-2025		20	Anatomy	1	1	Practical	Cerebral cortex Anatomy	NS-A-014	Identify the lobes, sulci & gyri and cortical areas of cerebrum	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Sarwat
2024-2025		20	Physiology	1	1	Theory (Lecture/Tutorial)	Cerebellum and Basal Ganglia Contributions to Overall Motor Control	NS-P-013	Enlist cerebellar nuclei. Enlist features of cerebellar dysfunction	1	Guyton and Hall Textbook of Physiology 14th Edition	Integrated with Medicine. Dr. Humera
2024-2025		20	Physiology	1	2	Theory (Lecture/Tutorial)	Contributions to Overall Motor Control	NS-P-014	Enlist components of basal ganglia in relation to other structures of the brain. Discuss functions of basal ganglia.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-2025		20	Physiology	1	3	Theory (Lecture/Tutorial)	Contributions to Overall Motor Control	NS-P-014	Discuss pathophysiology and features of Parkinson's disease. Elaborate the role of Dopamine in basal ganglia	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		20	Physiology	1	4	Theory (Lecture/Tutorial)	Special Senses. Optics of the eye. Fluid system of the eye-intraocular fluid	NS-P-015	Discuss functional anatomy of the eye.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba

2024-2 025		20	Physiology	1	5	Theory (Lecture/ Tutorial)	Special Senses. Optics of the eye. Fluid system of the eye-intraocular fluid	NS-P-01 5	Enlist refractive surfaces of the eye and elaborate mechanism of image formation on retina. Define cataract and glaucoma.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Sadia Zafar
2024-2 025		20	Physiology	1	6	Theory (Lecture/ Tutorial)	Central Neurophysiolo gy of Vision	NS-P-01 6	Describe the principal visual pathway from retina to visual cortex.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2 025		20	Physiology	1	7	Theory (Lecture/ Tutorial)	Central Neurophysiolo gy of Vision	NS-P-01 6	Define the physiological blind spot and describe its location. Explain Pupillary Light Reflex.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina
2024-2 025		20	Physiology	1	8	Theory (Lecture/ Tutorial)	The Sense of hearing Tympanic membrane and their Ossicular system	NS-P-01 6	Discuss how sound is conducted from tympanic membrane to cochlea	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-2 025		20	Physiology	1	9	Theory (Lecture/ Tutorial)	The Sense of hearing Tympanic membrane and their Ossicular system	NS-P-01 6	Describe the mechanism of impedance matching and its significance	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba

2024-2025		20	Physiology	1	1	Practical	Cranial Nerves	NS-P-022 to NS-P-026	OSPE Practise	1	Zafar Manual of Physiology Vol 2	Dr. Beenish
2024-2025		20	Physiology	1	2	Practical	Motor System	NS-P-027	Demonstrate the following superficial reflexes, corneal reflex, conjunctival reflex & Plantar Reflex	1	Zafar Manual of Physiology Vol 2	Dr. Omer
2024-2025		20	Pharmacology	1	1	Theory (Lecture)	Opioid Analgesics	NS-Ph-004	Write pharmacodynamic classification of Opioid analgesics. Identify 3 opioid receptor subtypes and describe ionic mechanisms that result from their activation. Opioid Analgesics Describe cardinal signs and treatment of opioid drug overdose and of the withdrawal syndrome. Describe the classification, mechanism of action, therapeutic uses, and adverse effects of opioid analgesics.	1	Lippincotts review pharmacology	Dr Rubina iqbal

2024-2025		20	Pharmacology	1	2	Theory (Lecture)	"Sedative/Hypnotics"	"NS-Ph-001 "	"Classify sedative-hypnotics Illustrate GABAA receptor-chloride ion channel macromolecular Complex and identify site of action of various sedative hypnotics Pharmacology & Therapeutics Sedative/Hypnotics List their clinical uses and adverse Effects Outline the management of overdose of sedative hypnotics Compare BZD, barbiturates; and BZD, Buspirone Identify the distinctive properties of buspirone, eszopiclone, ramelteon, zaleplon, zolpidem and suvorexant "	1	Lippincott's review pharmacology	Dr Rubina iqbal
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2024-2025		20	Pharmacology	1	3	Theory (Tutorial)	"Sedative/Hypnotics"	"NS-Ph-001 "	"Classify sedative-hypnotics Illustrate GABAA receptor-chloride ion channel macromolecular Complex and identify site of action of various sedative hypnotics Pharmacology & Therapeutics Sedative/Hypnotics List their clinical uses and adverse Effects Outline the management of overdose of sedative hypnotics Compare BZD, barbiturates; and BZD, Buspirone Identify the distinctive properties of buspirone, eszopiclone, ramelteon, zaleplon, zolpidem and suvorexant "	1	Lippincott's review pharmacology	Dr sara
2024-2025		20	Biochemistry	1	1	Theory (Lecture/Tutorial)	Inherited disorders of amino acid metabolism	NS-B-006	Briefly describe the cause, clinical features & management of Phenylketonuria.	1	Lippincott 9th edition	Dr Sadia khalil

2024-2025		20	Biochemistry	1	2	Theory (Lecture/Tutorial)	Inherited disorders of amino acid metabolism	NS-B-006	Outline the metabolism of branched chain amino acids (BCAA).	1	Lippincott 9th edition	Dr Sadia khalil
2024-2025		20	Biochemistry	1	3	Theory (Lecture/Tutorial)	Inherited disorders of amino acid metabolism	NS-B-006	Briefly describe the cause, clinical features & management of maple syrup urine disease (MSUD).	1	Lippincott 9th edition	Dr Sadia khalil
2024-2025		20	General Pathology & Microbiology	1	1	Tutorial	Trauma to CNS	NS-Pa-002	Concussion & contusion	1	Robins 11th Edition	Demonstrator
2024-2025		20	General Pathology & Microbiology	1	2	Tutorial	Demyelinating diseases of CNS	NS-Pa-003	Clinical feature & Diagnosis of multiple sclerosis	1	Robins 11th Edition	Demonstrator
2024-2025		20	General Pathology & Microbiology	1	3	Tutorial	Viruses	NS-Pa-004	Structure of virus, classification of DNA & RNA	1	Levinson 19th Edition	Demonstrator
2024-2025		20	PRISME (Behavioural Sciences)	1	1	Lecture	Accountability & Ethical foundations		Recognizes the importance of accountability in learning	1		Dr. Naurose
			Physiology	1	1	Lecture	The Sense of hearing Tympanic membrane and their Ossicular system	NS-P-017	Describe the mechanism of attenuation reflex and its significance	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida

2024-2025		20	Pharmacology	1	1	Lecture	Local Anesthetics Revision	NS-Ph 002	"Classify local anesthetics Describe their mechanism of action Outline various methods of giving local anesthesia Local Anesthetics Explain the relationship among tissue pH, drug pKa, and the rate of onset of local anesthetic action Discuss 4 factors that determine the susceptibility of nerve fibers to local anesthetic blockade Describe the major toxic effects of the local anesthetics Explain how hyperkalemia facilitates the cardiac toxicity of local anesthetics"	1	Lippincotts review Pharmacology	Dr Iqra Ijaz
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2024-2 025		20	PRISME (Dental Education)	1	1	Lecture	Microsoft Word Fundamentals		Identify key interface elements (Ribbon, QuickAccess Toolbar, status bar). Recognise the difference between character and paragraph formatting. List common document layout tools (page breaks, margins, orientation). Describe how to insert and caption basic objects (tables, pictures). Demonstrate saving, exporting to PDF and printing a document	1		Dr. Salar Arsalan
2024-2 025		20	Holy Quran	1	1	Theory (Lecture/ Tutorial)	RISALAT		Recognize the finality of prophet hood	1	notes	Ms Amna
2024-2 025		20	Islamiyat	1	1	Theory (Lecture/ Tutorial)	Importance of Prayer		spiritual and moral	1	notes	Ms Amna
2024-2 025		20	Islamiyat	1	2	Theory (Lecture/ Tutorial)	Importance of Prayer		social impact	1	notes	Ms Amna
2024-2 025		20	Pak Studies	1	1	Theory (Lecture/ Tutorial)	Creation of Pakistan		basic organ of creation of pakistan	1	notes	Ms Amna
2024-2 025		20	Pak Studies	1	2	Theory (Lecture/ Tutorial)	Creation of Pakistan		creation and features of pakistan	1	notes	Ms Amna

Session	Section/ class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/Tuto rial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2 025		21	Anatomy	1	1	Theory (Lecture)	Thalamus & Hypothalamus Connections, Hypophyseal Portal System, Thalamic & Hypothalamic Clinical Correlates	NS-A-03 9	Discuss the blood supply, nuclei and major connections of thalamus. Discuss the clinical correlates of thalamus	1	Snell`s Clinical Neuroanato my Eighth Edition	Prof. Dr. Nahid
2024-2 025		21	Anatomy	1	2	Theory (Lecture)	Thalamus & Hypothalamus Connections, Hypophyseal Portal System, Thalamic & Hypothalamic Clinical Correlates	NS-A-03 9	Discuss the blood supply, nuclei and major connections of hypothalamus Describe the Hypothalamo-Hypophyseal Portal System. Discuss the clinical correlates hypothalamus (Thalamic Pain, Thalamic Hand, Diabetes Insipidus)	1	Snell`s Clinical Neuroanato my Eighth Edition	Prof. Dr. Nahid

2024-2025		21	Anatomy	1	3	Theory (Lecture)	Brain Blood Supply, Circle of Willis	NS-A-036, NS-A-031	Discuss the origin, course, branches and distribution of internal carotid and vertebral artery Discuss/Draw and label the formation of Circle of Willis	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-2025		21	Anatomy	1	4	Theory (Lecture/Tutorial)	Dural Venous Sinuses, Cavernous Sinus Intracranial Hemorrhages,	NS-A-032, NS-A-033, NS-A-034	Discuss the location, origin and termination of dural venous sinuses. Discuss the important structures associated with the cavernous sinus and its clinical significance in relation to the danger area of the face Discuss the anatomical basis of extradural, subdural and subarachnoid hemorrhages	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-2025		21	Physiology	1	1	Theory (Lecture/Tutorial)	Functional anatomy of the cochlea. Auditory nervous pathways	NS-P-018	Describe the physiological anatomy and function of basilar membrane & organ of corti	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa

2024-2 025		21	Physiology	1	2	Theory (Lecture/T utorial)	Functional anatomy of the cochlea. Auditory nervous pathways	NS-P-01 8	Give the normal range of frequency for hearing	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina Rizvi
2024-2 025		21	Physiology	1	3	Theory (Lecture/T utorial)	Functional anatomy of the cochlea. Auditory nervous pathways	NS-P-01 8	Describe the role of Place principle in determination of sound frequency	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2 025		21	Physiology	1	4	Theory (Lecture/T utorial)	The Chemical Senses- Taste and Smell	NS-P-01 9	Enlist the primary taste sensations.	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Sadia Zafar
2024-2 025		21	Physiology	1	5	Theory (Lecture/T utorial)	The Chemical Senses- Taste and Smell	NS-P-01 9	Describe the physiological anatomy and location of taste buds.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2 025		21	Physiology	1	6	Theory (Lecture/T utorial)	The Chemical Senses- Taste and Smell	NS-P-01 9	Trace the taste pathway	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba

2024-2025		21	Physiology	1	7	Theory (Lecture/Tutorial)	The Chemical Senses- Taste and Smell	NS-P-019	Enlist the primary sensations of smell	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina
2024-2025		21	Physiology	1	8	Theory (Lecture/Tutorial)	The Chemical Senses- Taste and Smell	NS-P-019	Describe the physiological anatomy and location of olfactory membrane and olfactory receptors	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		21	Physiology	1	9	Theory (Lecture/Tutorial)	The Chemical Senses- Taste and Smell	NS-P-019	Describe the physiological anatomy and location of olfactory membrane and olfactory receptors	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		21	Physiology	1	1	Practical	Motor System	NS-P-027	Demonstrate the following superficial reflexes, corneal reflex, conjunctival reflex & Plantar Reflex	1	Zafar Manual of Physiology Vol 2	Dr. Waqas
2024-2025		21	Physiology	1	2	Practical	Deep Reflexes	NS-P-028	Examination of Deep tendon reflexes	1	Zafar Manual of Physiology Vol 2	Dr. Shaista

2024-2025		21	Pharmacology	1	1	Theory (Lecture)	Anti seizure drugs	NS-Ph-005	<p>Classify antiseizure drugs</p> <p>List the drugs of choice for partial seizures, generalized tonic-clonic seizures, absence and myoclonic seizures, and status epilepticus</p> <p>An seizure drugs</p> <p>Identify the mechanisms of antiseizure drug action at the levels of specific ion channels and/or neurotransmitter systems</p> <p>Highlight the uses, adverse effects and drug interactions of carbamazepine, phenytoin, and valproic acid</p> <p>Identify the distinctive toxicities of new antiseizure drugs</p> <p>Outline the management of status epilepticus</p>	1	Lippincotts review Phramacology 8th edition	Dr Rubina Iqbal
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2024-2025		21	Pharmacology	1	2	Theory (Lecture)	Anti seizure drugs	NS-Ph-005	<p>Classify antiseizure drugs</p> <p>List the drugs of choice for partial seizures, generalized tonic-clonic seizures, absence and myoclonic seizures, and status epilepticus</p> <p>An antiseizure drugs</p> <p>Identify the mechanisms of antiseizure drug action at the levels of specific ion channels and/or neurotransmitter systems</p> <p>Highlight the uses, adverse effects and drug interactions of carbamazepine, phenytoin, and valproic acid</p> <p>Identify the distinctive toxicities of new antiseizure drugs</p> <p>Outline the management of status epilepticus</p>	1	Lippincott's review of Pharmacology 8th edition	Dr Rubina Iqbal
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2024-2025		21	Pharmacology	1	3	Theory (Tutorial)	Anti seizure drugs	NS-Ph 005	<p>Classify antiseizure drugs</p> <p>List the drugs of choice for partial seizures, generalized tonic-clonic seizures, absence and myoclonic seizures, and status epilepticus</p> <p>An antiseizure drugs</p> <p>Identify the mechanisms of antiseizure drug action at the levels of specific ion channels and/or neurotransmitter systems</p> <p>Highlight the uses, adverse effects and drug interactions of carbamazepine, phenytoin, and valproic acid</p> <p>Identify the distinctive toxicities of new antiseizure drugs</p> <p>Outline the management of status epilepticus</p>	1	Lippincott's review of Pharmacology 8th edition	Dr Sidra
2024-2025		21	Biochemistry	1	1	Theory (Lecture/Tutorial)	Glutamine Metabolism	NS-B-002	Briefly describe the metabolism & importance of glutamine in human body	1	Lippincott 9th edition	Prof Dr Sadia Amir

2024-2025		21	Biochemistry	1	2	Theory (Lecture/Tutorial)	Hyperammonemia	NS-B-003	Enlist inherited & acquired causes of hyperammonemia. Describe the effects of hyperammonemia on brain. Outline the management options for hyperammonemia.	1	Lippicott 9th edition	Prof Dr Sadia Amir
2024-2025		21	Biochemistry	1	3	Theory (Lecture/Tutorial)	Hyperammonemia	NS-B-003	Enlist inherited & acquired causes of hyperammonemia. Describe the effects of hyperammonemia on brain. Outline the management options for hyperammonemia.	1	Lippicott 9th edition	Prof Dr Sadia Amir
2024-2025		21	General Pathology & Microbiology	1	1	Tutorial	Herpes Simplex Virus Infection	NS-Pa-005	Discuss Herpes Simplex Virus	1	Levinson 19th Edition	Demonstrator
2024-2025		21	General Pathology & Microbiology	1	2	Tutorial	Varicella Zoster Virus Infection	NS-Pa-006	Discuss Varicella Zoster Virus	1	Levinson 19th Edition	Demonstrator

2024-2025		21	General Pathology & Microbiology	1	3	Tutorial	Polio Virus Infection	NS-Pa-007	Discuss Polio Virus	1	Levinson 19th Edition	Demonstrator
		21	PRISME (Behavioural Sciences)	1	1	Lecture	Self-directed Learning		To independently develop understanding and demonstration of professional patient communication by exploring relevant literature, observing role model behavior in clinical environments, and reflecting on their interactions during simulated or observed patient encounters	1		Dr. Farhat
2024-2025		21	Physiology	1	1	Lecture	Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters	NS-P-001	Describe the general organization of nervous system, Classify synapse and explain the physiological anatomy of chemical synapse. Elaborate the role of synapse in processing information	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Amina

2024-2025		21	PRISME (Community Dentistry)	1	1	Lecture	Introduction to Research, Types of Research & Research Cycle		Define research and its types Explain the need for research in healthcare Recognize research applications Distinguish between qualitative and quantitative research Define basic, applied, clinical, and translational research Identify and describe key stages of the research cycle	1		Dr Lubna
2024-2025		21	PRISME (Dental Education)	1	1	Lecture	Research		Research	1		Dr Salar Arsalan
2024-2025		21	PRISME (Dental Education)	1	1	Lecture	Ethics		Ethics	1		Dr Salar Arsalan
2024-2025		21	Holy Quran	1	1	Theory (Lecture/Tutorial)	believe in here after		Akhrat	1	notes	Ms Amna
2024-2025		21	Islamiyat	1	1	Theory (Lecture/Tutorial)	Prayer		spiritual and moral impact in building personality	1	notes	Ms Amna

2024-2 025		21	Islamiyat	1	2	Theory (Lecture/T utorial)	Prayer		sense of patience	1	notes	Ms Amna
2024-2 025		21	Pak Studies	1	1	Theory (Lecture/T utorial)	Explain the ethnic		distribution of pakistan	1	notes	Ms Amna
2024-2 025		21	Pak Studies	1	2	Theory (Lecture/T utorial)	explain the ethnic		problems of people	1	notes	Ms Amna

Session	Section / class code	Week No	subject	TOTAL HOURS in a week	No of (Lecture/Tutorial) subject wise	Mode of Teaching	Topic	Code	Learning Objective	Hours Duration	Reference	Facilitator
2024-2025		22	Anatomy	1	1	Theory (Lecture)	Reticular System, Thalamus & Hypothalamus Overview	NS-A-037, NS-A-038	Basal Reticular System Thalamus and hypothalamus in relation to limbic system	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr Nahid
2024-2025		22	Anatomy	1	2	Theory (Lecture)	Ventricular System, CSF Physiology	NS-A-017, NS-A-035	Describe ventricular system (Lateral, 3rd & 4th ventricles), Explain the formation, circulation and absorption of CSF (Cerebrospinal fluid)	1	Snell's Clinical Neuroanatomy Eighth Edition	Prof. Dr Nahid
2024-2025		22	Anatomy	1	3	Theory (Lecture)	Cranial Nerve Nuclei and Pathways	NS-A-020	Describe the location of cranial nerve nuclei, their functional components, and distribution, and trace the course of cranial nerve V, VII, VIII, IX, and XII from its intracranial origin to the respective skull foramina.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal

2024-2025		22	Anatomy	1	4	Theory (Lecture)	Cranial Nerve Nuclei and Pathways	NS-A-020	Describe the location of cranial nerve nuclei, their functional components, and distribution, and trace the course of cranial nerve V, VII, VIII, IX, and XII from its intracranial origin to the respective skull foramina.	1	Snell's Clinical Neuroanatomy Eighth Edition	Dr. Kanwal
2024-2025		22	Physiology	1	1	Theory (Lecture/Tutorial)	Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters	NS-P-001	Classify the substances that act as neurotransmitters or synaptic transmitters. Enlist functions related to dentistry of each group.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Hafsa
2024-2025		22	Physiology	1	2	Theory (Lecture/Tutorial)	Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters	NS-P-001	Define Excitatory and inhibitory postsynaptic potential and explain their mechanism of generation	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Tooba
2024-2025		22	Physiology	1	3	Theory (Lecture/Tutorial)	Organization of the Nervous System, Basic functions of Synapses, and Neurotransmitters	NS-P-001	Discuss the effects of hypoxia, acidosis and alkalosis on synaptic transmission	1	Guyton and Hall Textbook of Physiology 14th Edition	Prof. Dr. Shahina

2024-2025		22	Physiology	1	4	Theory (Lecture/Tutorial)	Sensory Receptors, Transduction of sensory stimuli into nerve impulses	NS-P-003	Classify the nerve fibers on the basis of diameter and speed of conduction.	1	Guyton and Hall Textbook of Physiology 14th Edition	Dr. Nida
2024-2025		22	Physiology	1	1	Practical	Hypothalamus	NS-P-029	Recording Body Temperature	1	Zafar Manual of Physiology Vol 2	Dr. Nida
2024-2025		22	Physiology	1	2	Practical	Motor System, Cranial Nerves, Sensory System, Deep Reflexes, Hypothalamus	NS-P-022 to NS-P-029	OSPE Practise	1	Zafar Manual of Physiology Vol 2	Dr. Fahad

2024-2025		22	Pharmacology	1	1	Theory (Lecture)	Cholinergic Drugs (agonists) revision	NS-Ph-007	<p>Classify cholinomimetics according to chemistry & mechanism of action.</p> <p>Describe actions of acetylcholine on different organ systems of body.</p> <p>Enumerate the adverse effects of acetylcholine & cholinergic drugs</p> <p>Cholinergic Drugs (agonists)</p> <p>Explain the salient pharmacological properties of cholinesterases with their appropriate clinical uses.</p> <p>Differentiate between cholinergic and myasthenic crisis</p> <p>Describe the management of myasthenia gravis.</p> <p>Explain the role of Pilocarpine in glaucoma</p> <p>Enumerate the signs and symptoms of organophosphate poisoning due to cholinergic excess.</p> <p>Enlist steps in the management of organophosphate Compound (OPC) poisoning</p> <p>Describe aging and role of oximes in the management.</p>	1	Lippincotts Pharmacology	Dr. Iqra Ijaz	65
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									Explain the prevention of OPC poisoning			
2024-2025		22	Pharmacology	1	2	Theory (Lecture)	Cholinergic Drugs (antagonists) revision	NS-Ph 007	Classify anti-cholinergic drugs (on the basis of therapeutic uses) Describe pharmacological actions of atropine Differentiate between atropine and hyoscine Enlist therapeutic uses of atropine Enumerate adverse effects of anti-cholinergic drugs	1	Lippincott's Pharmacology	Dr Rubina iqbal
2024-2025		22	Pharmacology	1	3	Theory (LTutorial)	"Skeletal Muscle Relaxants"	"NS-Ph 008 "	"Classify skeletal muscle relaxants according to their mechanism of action. Describe mechanism of action and adverse effects of non-depolarizing skeletal muscle relaxants Skeletal Muscle Relaxants Describe mechanism of action and adverse effects of depolarizing skeletal muscle relaxants. Enumerate therapeutic uses of peripherally acting skeletal muscle relaxants. Define and give pharmacological basis and treatment of malignant hyperthermia	1	Lippincott's Pharmacology	dr Fatma

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2024-20 25		22	Bioche mistry	1	1	Theory (Lecture/T utorial)	Neurotransmit ters	NS-B-00 5	Explain the biosynthesis, mechanism of action, and physiological role of acetylcholine, and discuss the clinical consequences of its deficiency	1	Lippincott 9th edition	Prof Dr Sadia Amir
2024-20 25		22	Bioche mistry	1	2	Theory (Lecture/T utorial)	Neurotransmit ters	NS-B-00 5	Explain the biosynthesis, mechanism of action, and physiological role of acetylcholine, and discuss the clinical consequences of its deficiency	1	Lippincott 9th edition	Prof Dr Sadia Amir
2024-20 25		22	Bioche mistry	1	3	Theory (Lecture/T utorial)	Neurotransmit ters	NS-B-00 5	Outline the reactions involved in biosynthesis of catecholamines.	1	Lipincott 9th edition	Prof Dr Sadia Amir
2024-20 25		22	General Patholo gy & Microbi ology	1	1	Tutorial	Clostridium Tetani Infection	NS-Pa-00 8	Discuss Clostridium Tetani	1	Levinson 19th Edition	Demonstr ator
2024-20 25		22	General Patholo gy & Microbi ology	1	2	Tutorial	Clostridium Botulinum	NS-Pa-00 8	Discuss Clostridium Botulinum	1	Levinson 19th Edition	Demonstr ator
2024-20 25		22	PRISME (Dental Educati on)	1	1	Lecture	Stress copy Mechanism	Stress copy Mechani sm	Stress copy Mechanism	1		Dr Salar Arsalan

2024-20 25		22	PRISME (Communi- ty Dentistr- y)	1	2	Theory (Lecture/T utorial)	Introduction to Research		Define research and its types Explain the need for research in healthcare Recognize research applications	1	Text Book of Preventive & Community Dentistry (S.S Hiremath 2nd Edition	Dr Lubna
2024-20 25		22	PRISME (Behavi- oural Sci- ences)	1	3	Lecture	Introduction to Social Responsibility		Define the concept of social responsibility	1		Dr. Naurose
2024-20 25		22	PRISME (Communi- ty Dentistr- y)	1	4	Theory (Lecture/T utorial)	Types of Research		Distinguish between qualitative and quantitative research Define basic, applied, clinical, and translational research	1	Text Book of Preventive & Community Dentistry (S.S Hiremath 2nd Edition	Dr Lubna
2024-20 25		22	PRISME (Dental Education)	1	5	Lecture	(Career Pathways) Goal Development		(Career Pathways) Goal Development	1		Dr Salar Arsalan
2024-20 25		22	PRISME (Dental Education)	1	6	Lecture	Dress Code		Dress Code	1		Dr Salar Arsalan

2024-20 25		22	PRISME (Behavioural Sciences)	1	7	Lecture	Cultural Identity, Norms, and Beliefs in Oral Health		Discuss the role of dentists in promoting social welfare through professional practice. Analyze how cultural backgrounds influence oral health beliefs and behaviors. Develop strategies for delivering culturally inclusive dental care.	1		Dr. Naurose
2024-20 25		22	Holy Quran	1	1	Theory (Lecture/T utorial)	Prayer		impact of pyarer in building righteous community	1	Notes	Ms. Amna
2024-20 25		22	Islamiya t	1	1	Theory (Lecture/T utorial)	Akhrat		Appraise continuity of life	1	Notes	Ms Amna
2024-20 25		22	Islamiya t	1	2	Theory (Lecture/T utorial)	akhrat		life beyond material	1	Notes	Ms Amna
2024-20 25		22	Pak Studies	1	1	Theory (Lecture/T utorial)	role of sir syed ahmed for pakistan		Role of sir syed ahmed for pakistan	1	Notes	Ms Amna
2024-20 25		22	Pak Studies	1	2	Theory (Lecture/T utorial)	Muslim league		Establishment of muslim league	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	Module - 3 Exam	Complete Module - 3 Syllabus

			Dentistry Oral Pathology Operative Dentistry		
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 Pharmacology Physiology	Block 2 Exam (Theory)	Complete Block 2 Syllabus
25	28th October 2025	Tuesday	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	Islamiyat / Pak. Study	Send Up Islamiyat / 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	Send Up Block 3	Block 3 Complete Syllabus

			& Microbiology Pharmacology Oral Biology & Tooth Morphology Oral Pathology Community Dentistry		
	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 2 - 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	18	2	26	1	0	1	15
Physiology	14	2	22	0	1	1	15
Biochemistry	6	1	10	0	0	1	6
Oral Biology	14	2	22	2	0	1	24
General Pathology & Microbiology	12	1	16	1	0	1	15
Pharmacology	9	1	13	0	0	1	6
Community Dentistry/ Dental Radiology	3	0	3	1	1	1	24
Oral Pathology-Periodontology	4	1	8	1	0	1	15
Total Questions	80	10		6	2	8	
Net Total	80x1=80	10x4=40	120	6x9=54	2x9=18	8x6=48	120
Internal Assessment Marks*	30			30			
Grand Total	150			150			

Table of Specification

Block 2 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 2 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 85 % = 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 2: Learning Resources

Subject	Learning Resources
Physiology	1. Guyton & Hall. Textbook of Medical Physiology (14th ed.).
Anatomy	1. Snell's: Neuroanatomy 2. General Anatomy by Laiq Hussain Siddiqui
Histology	1. Medical Histology: Text and Atlas by Laiq Hussain Siddiqui
Biochemistry	1. Harper's Illustrated Biochemistry (32nd ed.) by Rodwell et al. 2. Lippincott Illustrated Reviews: Biochemistry (8th ed.) by Abali et al.
Pathology & Microbiology	1. Robbins & Cotran Pathologic Basis of Disease 2. Review of Medical Microbiology and Immunology by Levinson
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.

Subject	Learning Resources
Oral Biology & Tooth Morphology	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.)
Gross Anatomy	1. Snell's Clinical Anatomy by Regions (12th ed.)
Physiology	1. Guyton & Hall. Textbook of Medical Physiology (14th ed.)
Biochemistry	1. Harper's Illustrated Biochemistry (32nd ed.) by Rodwell et al. 2. Lippincott Illustrated Reviews: Biochemistry (8th ed.) by Abali et al.
Microbiology	1. Levinson, W. Review of Medical Microbiology and Immunology (16th ed.)
Pharmacology	1. Vanderah, T. W. Katzung's Basic & Clinical Pharmacology (16th 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.

Subject	Learning Resources
Oral Biology & Tooth Morphology	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. Orban's Oral Histology & Embryology (13th ed.) 4. Rajkumar, K. Oral Anatomy, Histology, Physiology & Tooth Morphology (2nd ed.)

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.