

# SWAT MEDICAL COLLEGE SWAT

DEPARTMENT OF MEDICAL EDUCATION



## FOUNDATION MODULE-II

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**3RD YEAR MBBS**

BLOCK: G

CLASS OF 2021-26

DURATION: 5 WEEKS

FROM: 13<sup>TH</sup> FEBRUARY 2024 TO 15<sup>TH</sup> MARCH 2024

STUDENT NAME

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Dear Student

The Department of Medical Education (DME) has successfully conducted faculty training for the curation of study guides. In accordance with the guidelines set by Khyber Medical University, Peshawar, this study guide has been meticulously developed by the respective block coordinator. For any queries or concerns, kindly refer to the "Query and Troubleshooting" section for contact information.

Please be advised that the timetables provided in the study guides are tentative, and the final versions will always be accessible on the official website, notice boards, and social media platforms a few days before the start of the module.

It is crucial to acknowledge that this guide is subject to continuous improvement, aligning with updates to module learning objectives and blueprints by KMU Peshawar. Notably, the learning objectives and blueprints outlined in this guide represent an enhanced and revised version of those originally provided by KMU.

For more information on modules and examination blueprints, please visit

<https://kmu.edu.pk/examination/guidelines>.

Your login link of official website: [https://mis.swatmedicalcollege.edu.pk/login/student\\_login](https://mis.swatmedicalcollege.edu.pk/login/student_login)

## 2 List Of Abbrevation

<u>KEY:</u>	Abbrevation	<u>KEY:</u>	Abbrevation
<b>Anat-L</b>	Anatomy Lecture	<b>MCQ:</b>	Multiple Choice Questions
<b>Anat-SGD</b>	Small Group Discussion in Anatomy	<b>EMQ:</b>	Extended Matching Question
<b>Bio-L</b>	Biochemistry Lecture	<b>IL:</b>	Interactive Lectures
<b>Bio-P</b>	Biochemistry Practical	<b>CBL:</b>	Case Based Learning
<b>CMed</b>	Community Medicine	<b>SBL:</b>	Scenario Based Learning
<b>DSL</b>	Directed Self Learning	<b>OSPE:</b>	Objective structured Practical Evaluation
<b>FDT</b>	Film/Demonstration/Tutorial	<b>OSCE:</b>	Objective structured Clinical Evaluation
<b>FMed</b>	Forensic Medicine	<b>HEC:</b>	Higher Education Commission
<b>Histo-P</b>	Histology Practical	<b>MIT:</b>	Mode of transfer of informations
<b>IPS</b>	Islamiyat/Pak Studies	<b>QEC:</b>	Quality Enhancement Cell
<b>SDL</b>	Self-Directed learning	<b>SAQs</b>	Short Answer Questions

### 3 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Aziz Ahmad	Dean/principal	
2.	Dr. M Junaid Khan	DME	Director
<b>Module Team</b>			
3.	Prof. Dr. Imran-ud-Din	Pathology	Chairperson
4.	<b>Dr. Younas Khan</b>	<b>Forensic Medicine &amp; Toxicology</b>	<b>Block Coordinator</b>
5.	Dr. Muneeb Khan	Community Medicine	Member
6.	Dr. Rehman Shah	Pharmacology	Member
7.	Dr. Shabir Ahmed	Pathology	Member
8.	Dr. Siyab Ahmed	Pathology	Member
9.	Prof. Dr. Aurang Zeb	Pathology	Member



## 4 Recommended List Of Icons



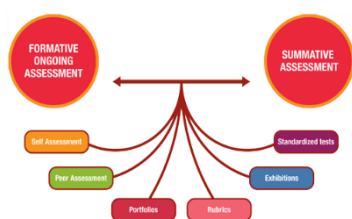
**Introduction To Case**



**For Objectives**



**Critical Questions**



**Assessment**



**Resource Material**

## 5 Mission/ Vision of the College

### 5.1 Mission Statement of the Institution:

To impart quality medical education through evidence based teaching incorporating professionalism, patient safety, research, critical thinking, ethics and leadership.

### 5.2 Vision Statement of the Institution:

To be a center of excellence in medical education, patient care and research globally.



## 6 Overview of the Module/ Preface

Welcome to the 3<sup>rd</sup> year MBBS program/foundation Module-II, where the overarching goal is to equip students with a profound understanding of medical science and practice. Throughout the curriculum/Foundation module, emphasis is placed on integrating theoretical knowledge with practical applications, ensuring a comprehensive educational experience. The core themes of modules, including Molecules, bacteria and cell injury, Aging and Death are meticulously designed to foster a deep understanding of pathology, pharmacology, forensic Medicine, Community medicine and clinical skills.

Students will gain hands-on experience through clinical rotations in diverse settings such as Skill lab, interactive lectures and SGD, providing a well-rounded education. The study guide serves as a crucial reference for assessment and evaluation. It outlines the components that will be assessed, such as knowledge and basic sciences practical implications, and the corresponding assessment tools, which include MCQs, SEQ and OSPE.

## 7 Introduction/ Organization of Module

### 7.1 Introduction:

Block G has two modules in it, i.e., 1. Foundation Module II and 2. Infection and Inflammation Module. Foundation Module II has two themes that will enable students to know the general principles of Pathology, Pharmacology, and Forensic Medicine in understanding and dealing with the health issues and death process.

### 7.2 Rational:

The rationale of the Foundation module II is the study of human body cells along with various **bacteria** and poisons acting on them, producing ill effects on human body are integrated with the various treatment options and disease prevention and the effect of aging process and the changes that occur after death are integrated in terms of their medicolegal importance.

### 7.3 Organization of the Study guide:

Foundation Module-II is organized as follows.

S.No.	Theme	Duration
1.	Molecules, bacteria and cell injury	3 weeks
2.	Aging and Death	2 weeks

### 7.4 Teaching Strategies:

The following teaching/ learning methods are used to promote better understanding:

#### A. Large Group Formats:

- Interactive Lectures:** In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.
- Directed Self Learning:** Directed self-learning is an active learning approach where the learners are provided with predefined learning objectives and some facilitation through the learning process in the form of guidance and supervision. It helps establish a strong foundation for autonomous and deep learning.
- Self Directed Learning:** Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

#### B. Small Group Formats:

- Small Group Discussions:** This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.
- Practical Demonstration:** Basic science practicals related to anatomy, biochemistry and physiology are scheduled for student learning.

## 7.5 Assessment strategies

Assessments within the MBBS program at STMC consist of both formative and summative evaluations. These assessments are integral to monitoring student progress and academic performance.

### A. Formative Assessment:

Formative assessments, accounting for 10% of the total marks assigned to each block, serve as ongoing evaluations designed to provide feedback and facilitate learning. The allocation of this 10% can be determined in accordance with the blueprint of KMU and further distributed as per the academic council's recommendations at STMC. Formative assessments are conducted after the completion of each module, ensuring that students receive timely feedback to enhance their understanding and performance.

### B. Summative Assessment:

Summative assessments, which comprise the majority of the assessment weighting (90% of all marks), are conducted and overseen by KMU, as part of the annual examination process. The summative annual examination is organized and conducted by KMU, which carries out the evaluation and grading. This summative assessment evaluates students' comprehensive understanding of the curriculum and accounts for a significant portion of their final scores.

### C. Assessment Tools:

- Various assessment tools are employed to gauge students' knowledge and competencies. These tools include:
- Written Examinations: These encompass Multiple Choice Questions (MCQ) and Short Essay Questions (SEQ) that evaluate students' theoretical knowledge.
- Performance Assessments: Objective Structured Practical Examinations (OSPE) and Objective Structured Clinical Examinations (OSCE) are used to assess practical skills and clinical competence.
- In-Training Assessments: Clinical logbooks provide a comprehensive record of students' practical experiences and serve as a valuable tool for tracking their progress.
- Assignments: Presentations, projects, and self-reflection assignments are included in the assessment process to enhance students' critical thinking and research skills

## 7.6 Feedback mechanism and summary

The students feedback will be taken at the end of each module to further improve the medical education quality and their learning capabilities so as to continually upgrade the standards of medical education.

In short, The study guides will help the students a lot by facilitating them in studying various subjects being integrated in various modules alongwith bringing improvement in learning by the students, assessment through various means and with feedback.

## 8 Table Of Specification

Subject	weightage	No. of hours allocated in SG	Percent Distribution*	Assessment				
				IPA			MCQ	Assignment
				OSCE/OSP E	VIV A	Case study/DS L /		
Pathology	24.48%	25	29.05%	5	2		12	
Forensic Medicine & Toxicology	12.24%	12	14%	2	2		6	
Pharmacology	38.77%	32	37.2%	2	2		19	
Community Medicine	10.20%	8	9.30 %	1	2		5	
ENT	2.04%	1	1.16%	-	-		1	
Eye	6.12%	3	3.49%	-	-		3	
Prime including research	6.12%	4+3	4.65%	-	-		3	
Family Medicine	-	1	1.15%	-	-		0	
Medicine(history & Physical examination)	-			1	-		-	
Surgery(history & Physical examination)	-			1	-		-	
<b>Total</b>		86	100%	12	08		49	

Note :

\*Number of hours allocated in SG for specific subject/total hours  $\times$  100

Weightage based on MCQs eg., No. of MCQs allocated in subject/ total no. of MCQs  $\times$  100



## 9 Learning Objectives

### 9.1 General Learning Outcomes

By the end of this module the students would be able to;

- 1) Define pathology, its different branches and enumerate clinically important bacteria.
- 2) Describe the structure of bacterial cell and mechanisms by which they cause the disease.
- 3) Describe methods used to identify different microbes in laboratory and explain the interventions employed to prevent infections including vaccines.
- 4) Describe cell injury, its different mechanisms and sub cellular responses to cell injury.
- 5) Describe necrosis, apoptosis and adaptive changes seen in clinical settings and its identification in surgical specimens.
- 6) Define common terms related to Pharmacology.
- 7) Describe the basic principles of pharmacokinetics and pharmacodynamics and apply these principles to clinical practice as they relate to drug absorption, distribution, metabolism, excretion, mechanism of action, clinical action and toxicity.
- 8) Describe the cellular and biochemical sites where drugs bind to act.
- 9) Describe the general principles of drug interactions in relation to clinical practice.
- 10) Describe the process of new drug development.
- 11) Identify different dosage forms of drugs.
- 12) Demonstrate searching accurate information quickly in a formulary.
- 13) Demonstrate administration of a drug through intramuscular and intravenous routes.
- 14) Write down the basic format of drug prescription and describe the general principles of prescribing drugs.
- 15) Write correctly medical abbreviations used in clinical practice.
- 16) Identify commonly used equipments in pharmacy.
- 17) Describe Forensic medicine, its different branches and importance.
- 18) Describe law and its various components.
- 19) Explain medicolegal system and legal procedure for a doctor.
- 20) Describe the contents of medical jurisprudence.
- 21) Describe the diagnosis of death and WHO death certificate.
- 22) Describe different refractive errors and its management.
- 23) Explain causes of watery eyes in both infants and elders and its management.
- 24) Describe the basic concept of health, disease and primary health care.
- 25) Demonstrate different pathological laboratory procedures and identify gross and microscopic features in the given specimens.
- 26) Demonstrate professionalism, respect, honesty and compassion by behaving in a courteous manner with colleagues and teachers during course activities like long lectures, SGDs and Practicals.
- 27) Describe the PMC code of Ethics
- 28) Describe the steps of process of developing a research protocol

## 9.2 Specific Learning Outcomes

### 1 THEME-I: (Molecules and Bacteria)

SNO	Subject: Pharmacology	Learning Outcomes	hours	MIT
	Topics			
1	Introduction to the subject	<p>Define basic terms like Pharmacology, Clinical Pharmacology, Therapeutics, drug, medicine, pro-drugs, prototype drugs, Materia medica, pharmacopoeia, formulary, national formulary, poisons, toxins, pharmacokinetics, pharmacodynamics, excipient, compounding and dispensing.</p> <p>Describe the branches of Pharmacology like Pharmacy, Pharmacognosy, pharmacogenetics, pharmacogenomics, toxicology and posology. Define prescription drugs, OTC drugs, WHO essential drugs and Orphan drugs with examples</p>	1	IL
2	Nomenclature of drugs	Describe how drugs are named, i.e. chemical, generic, approved, official and trade names of drugs with examples.	1	IL
3	Sources of drugs	<p>Enlist various sources of drugs. Give examples of drugs obtained from plants, animals, mineral and synthetic sources. Describe the genetic engineering source of drugs with examples</p>	1	IL
4	Active principles of crude drugs	Enlist important principles of crude drugs with examples.		
5	Routes of drug administration	Enlist various routes of drug administration.	2	IL
		Describe the merits and demerits of oral, sublingual, rectal, intramuscular, subcutaneous, intravenous, intra-arterial, inhalational, spinal, topical and transdermal routes of drug administration.		

		<p>Give examples of drugs given through oral, sublingual, rectal, intramuscular, subcutaneous, intradermal, intravenous, intra-arterial, inhalational, spinal, topical and transdermal routes of drug administration.</p> <p>Describe the difference between topical and transdermal routes of drug administration.</p> <p>Describe the difference between subcutaneous and intradermal routes of drug administration.</p>		
6	Absorption of drugs	Define drug absorption.	<i>I</i>	<i>IL</i>
		Describe various mechanisms of drug absorption like simple diffusion, facilitated diffusion, active transport, ion-pair transport, endocytosis and filtration with examples.		
		Describe the concept of ionization of drug molecules and clinical significance of ion trapping.		
		Describe factors affecting drug absorption.		
7	Bioavailability and Bioequivalence	<p>Define bioavailability, bioequivalence and pharmaceutical equivalence.</p> <p>Explain Time-Concentration curve.</p> <p>Describe AUC (Area Under the Curve).</p> <p>Describe the factors affecting bioavailability.</p>	<i>I</i>	<i>IL</i>
8	Hepatic first pass effect (Pre-systemic elimination)	Describe hepatic first-pass effect (Pre-systemic elimination) and its clinical significance.	<i>I</i>	<i>IL</i>
9	Enterohepatic circulation	<p>Define enterohepatic circulation.</p> <p>Describe enterohepatic circulation with examples and its clinical significance.</p>		
10	Distribution of drugs	<p>Define distribution of drugs.</p> <p>Define redistribution of drugs with example.</p> <p>Describe plasma protein binding and its clinical significance in diseased conditions.</p> <p>Describe factors affecting drug distribution.</p>	<i>I</i>	<i>IL</i>
	Volume of distribution	<p>Define volume of distribution.</p> <p>Enlist drugs with small volume of distribution.</p> <p>Enlist drugs with large volume of distribution.</p>		
	Loading dose	<p>Define loading dose of a drug.</p> <p>Enlist some drugs whereby loading dose is administered.</p> <p>Apply formula for calculating loading dose.</p>		
11	Physiological barriers to transport of	<p>Enlist important physiological barriers to transport of drugs.</p> <p>Describe important physiological barriers to</p>	<i>I</i>	<i>IL</i>

	drugs	transport of drugs like blood brain barrier and placental barrier with reference to their clinical significance.		
12	Biotransformation (metabolism) of drugs	Define biotransformation. Define xenobiotics. Describe the objectives of biotransformation and fate of drugs after biotransformation. Name major sites of biotransformation. Describe major drug metabolizing enzymes i.e. microsomal (P450) and non-microsomal enzymes. Describe the phases and reactions of biotransformation. Describe the factors affecting drug biotransformation.	<i>I</i>	<i>IL</i>
13	Genetic influence on biotransformation of drugs	Define pharmacogenetics and pharmacogenomics. Define idiosyncrasy with examples. Describe the genetic factors influencing biotransformation of drugs with examples.	<i>I</i>	<i>IL</i>
	Enzyme induction	Define enzyme induction. Enlist enzyme inducers. Describe enzyme induction and its clinical significance.		
	Enzyme inhibition	Define enzyme inhibition. Enlist enzyme inhibitors. Describe enzyme inhibition and its clinical significance. Describe suicide inhibition (mechanism-based inhibition) with examples of drugs.		
14	Excretion of drugs and drug clearance	Define drug excretion and drug clearance. Enlist major and minor routes of drug excretion. Differentiate between excretion, elimination and clearance. Apply the formula for calculating drug clearance.	<i>I</i>	<i>IL</i>
	Maintenance dose	Define maintenance dose of a drug. Apply the formula for calculating the maintenance dose. Apply Young's formula, Dilling's formula and Clark's formula for calculating doses of drugs.		
	Plasma half life	Define plasma half-life. Enlist drugs with short half-life. Enlist drugs with long half-life. Apply the formula for calculating plasma half life.		



		Explain the clinical significance of half life.		
15	Steady-state concentration of drugs	Define steady-state concentration of drugs. Describe the time to reach steady-state concentration of drugs. Describes the importance of steady-state concentration in clinical practice	1	IL
	First- and zero-order kinetics	Define first- and zero-order kinetics. Differentiate between first- and zero-order kinetics with examples. Explain the clinical significance of first- and zero-order kinetics		
	Bioassay and standardization	Define bioassay and standardization. Describe the relative importance of bioassay compared with physical or chemical assays. Describe the most common type of bioassay, i.e. three-point assay.		
16	Pharmacodynamics	Define pharmacodynamics. Define agonist, antagonist, partial agonist and inverse agonist with examples. Describe receptors. Define orphan receptors, serpentine receptors and spare receptors. Describe the biochemical and cellular sites of drug targets. Describe intracellular Second-messenger system and enlist some important Second-messengers. Describe up regulation and down regulation of receptors with examples. Define drug selectivity and specificity.	2	IL
	Dose-response curves (Graded and Quantal)	Define dose response curve, graded dose-response curve and quantal dose response curve. Describe graded dose-response curve and quantal dose-response curve. Describe the limitations of graded dose-response curve and its remedy in a quantal dose-response curve. Describe the significance of constructing dose-response curves. Explain the advantages of taking log dose values on the dose axis.		
17	Therapeutic index	Define therapeutic index. Describe therapeutic index with reference to its clinical importance. Apply formula for calculating therapeutic index Define median lethal dose, median toxic dose and median effective dose.	1	IL

		Enlist some drugs with narrow therapeutic index. Enlist some drugs with broad therapeutic index.		
	Protective index	Define protective index. Differentiate between therapeutic index and protective index.		
18	Therapeutic window	Define therapeutic window. Describe therapeutic window with reference to its clinical importance.	<i>I</i>	<i>IL</i>
	Potency and efficacy	Define potency and efficacy. Describe potency and efficacy with examples.		
		Describe the clinical importance of efficacy compared to potency.		
	Drug antagonism	Define drug antagonism. Enlist types of antagonism. Describe chemical, physiological (functional) and pharmacological (competitive/surmountable and non-competitive) antagonisms with examples		
19	Drug interactions	Define drug interaction. Define drug incompatibilities with examples. Describe pharmacokinetic drug interactions with examples and its clinical significance. Describe pharmacodynamics drug interactions with examples and its clinical significance. Describe drug-food interactions and drug-disease interactions with examples. Define summation, synergism and potentiation with examples.	<i>I</i>	<i>IL</i>
20	Tolerance and Tachyphylaxis	Define Tolerance, cross tolerance, reverse tolerance (sensitization), innate tolerance, tachyphylaxis and drug resistance. Describe the mechanisms of development of tolerance and tachyphylaxis. Define drug holidays with example.	<i>I</i>	<i>IL</i>
21	Adverse drug reactions	Define adverse drug effect, secondary effect and intolerance to a drug. Classify adverse drug reactions. Describe dose-related adverse effects (side effects and toxic effects) with examples. Describe non-dose-related adverse effects (idiosyncrasy and drug allergy) with examples. Describe causes of adverse drug reactions.	<i>I</i>	<i>IL</i>

		<p>Enlist some drugs causing hepatotoxicity.</p> <p>Enlist some drugs causing renal toxicity.</p> <p>Enlist some cardio toxic drugs.</p> <p>Enlist some drugs causing adverse effects on reproduction.</p>		
22	New drug development	<p>Describe the processes involved in drug discovery and development.</p> <p>Define lead compound and drug screening.</p> <p>Describe pre-clinical and clinical studies.</p> <p>Define placebo, placebo response and nocebo response.</p> <p>Define no-effect dose and minimum lethal dose.</p> <p>Describe 04 phases of clinical trials.</p> <p>Define post-marketing surveillance.</p> <p>Define single-blind, double-blind, crossover and ADME studies.</p> <p>Describe the role of Food and Drug Administration (FDA) in the drug development process.</p> <p>Differentiate between IND (Investigational New Drug) and NDA (New Drug Application)</p>	<i>I</i>	<i>IL</i>
	<b>Subject:</b> <b>Pathology</b>			
	<b>Topics</b>			
1.	Introduction to the subject	<p>Define pathology, microbiology and list its major branches</p> <p>Describe essential characteristics of five major groups of microorganisms</p> <p>Differentiate between prokaryotes and eukaryotic cells based on their structure and complexity of their organization</p>	<i>I</i>	<i>IL</i>
2.	Introduction to cell	<p>Define cell</p> <p>Describe structure of cell membrane</p> <p>Describe cell organelles</p>	<i>I</i>	<i>IL</i>
3	Classification of Bacteria	<p>Describe classification of bacteria based on oxygen requirement as aerobes and anaerobes with examples.</p> <p>Describe classification of bacteria based on staining characteristics, nature of cell wall, ability to grow in the presence of oxygen and ability to form spores.</p>	<i>I</i>	<i>IL</i>
4	Structure of bacterial cell	<p>Describe structure and function of each of various parts of the bacterial cell including cell wall, cytoplasmic membrane, Mesosome, ribosomes, granules and nucleoid</p> <p>Describe specialized structures outside the cell wall including capsule, flagella, pilli and glycocalyx</p> <p>List the differences between cell wall</p>	<i>I</i>	<i>IL</i>

		<p>characteristics of Gram Positive and Gram Negative Bacteria</p> <p>Describe classification and important functions of plasmids.</p> <p>Describe functions and arrangement of transposons.</p> <p>Describe structure, functions and medical importance of bacterial spores with examples</p>		
5	Bacterial growth curve	Describe various phases of bacterial growth curve	<i>I</i>	<i>IL</i>
	Normal Flora	Describe medically important members of normal flora and their anatomic location		
6	Bacterial genetics	<p>Define mutation</p> <p>Describe the classification of various types of mutations and their common causes.</p> <p>Describe methods of transfer of DNA within bacterial cells including process of conjugation, transduction, recombination and transformation.</p>	<i>I</i>	<i>IL</i>
7	Lab diagnosis of bacterial infections	<p>Describe the bacteriologic approach to diagnosis of bacterial infections including blood, throat, stool, sputum, spinal fluid, urine, genital tract and wound cultures.</p> <p>Describe general principals of various immunologic and nucleic acid based methods for identification of an organism</p>	<i>I</i>	<i>IL</i>
8	Bacterial pathogenesis	<p>Define the term pathogen, infection, virulence, communicable, endemic, epidemic and pandemic diseases, carrier, pathogens, opportunists, commensals and colonizers.</p> <p>Describe stages/determinants of bacterial pathogenesis.</p>	<i>I</i>	<i>IL</i>
		<p>Describe colonization, invasion, toxins, immune-pathogenesis.</p> <p>Differentiate between exotoxins and endotoxins.</p> <p>Describe the various modes of action of endotoxins and endotoxins produced by gram positive and gram-negative bacteria.</p> <p>Describe the four stages of a typical infectious disease and Koch's postulates for establishing the causal role of an organism in the disease.</p>		
9	Antibacterial Vaccines	<p>Define immunization and vaccination.</p> <p>Describe role of immunization in inducing active and passive acquired immunity.</p>	<i>I</i>	<i>IL</i>

		Enlist the current bacterial vaccines and their indications. Describe various types of bacterial vaccines in terms of composition, preparation, indications, route of administration and common side effects.		
	<b>Subject:</b>			
	<b>FORENSIC MEDICINE &amp; TOXICOLOGY</b>			
1	Introduction to the subject of Forensic Medicine	Describe forensic medicine and its various branches Describe pillars of forensic medicine Describe the various terminologies used in forensic medicine	<i>I</i>	<i>IL</i>
	Introduction to medicolegal system	Discuss different prevailing medicolegal systems in the world		
2	Introduction to Law	Describe its various types.	<i>I</i>	<i>IL</i>
	Legal proceedings	Describe court procedures for a doctor		
	Chain of evidence	Describe evidence, its types and recording of evidence		
	PPC and CrPC	Describe the relevant sections of Pakistan penal code and CrPC		
	Medical jurisprudence	Describe the components of medical jurisprudence (consent, negligence, secrecy, professional misconduct and privileged communication) Describe code of medical ethics Describe the duties of a registered medical practitioner		
	<b>Subject:</b>			
	<b>ENT</b>			
1	Introduction to the subject	Describe common ENT symptoms. Name common diseases of ENT. Name recommended books that students must read.	<i>I</i>	<i>IL</i>
	<b>Subject:</b>			
	<b>OPHTHALMOLOGY</b>			
1	Introduction to the subject; Career in Ophthalmology	Define Ophthalmology and its branches Highlight the scope of field of Ophthalmology as a future career	<i>I</i>	<i>IL</i>
2	Refractory errors	Describe refractive error and its effect on vision. Describe the concept of myopia and its	<i>I</i>	<i>IL</i>

		<p>correction.</p> <p>Describe the concept of hypermetropia and its correction.</p> <p>Describe the concept of astigmatism &amp; cylindrical lens.</p> <p>Describe the concept of presbyopia, its possible causes and correction.</p> <p>Describe aphakia and possible methods of its correction.</p>		
3	Watery Eyes	<p>Explain the structural details, development and functions of lacrimal system.</p> <p>Correlate the clinical presentation of watery eye with anatomical structures.</p> <p>Correlate the clinical features with a disease entity.</p> <p>Describe the causes, clinical features and treatment of congenital nasolacrimal duct obstruction.</p> <p>Assess the time of probing.</p> <p>Describe the causes, clinical presentation and treatment modalities.</p> <p>Differentiate between acute and chronic dacryocystitis.</p>	1	IL
	<b>SUBJECT:</b>			
	<b>COMMUNITY MEDICINE</b>			
1	Introduction to the subject	<p>Define Community medicine and Public health</p> <p>Describe the role of teaching of public health in prevention of diseases</p>	1	IL
2	Health system of Pakistan: INTRODUCTION	<p>Define health care system of Pakistan using WHO Health system framework</p>	1	IL
3	Health and disease	<p>Define community medicine, public health and preventive medicine.</p> <p>Discuss the history and philosophy of public health as well as its concepts and functions regionally &amp; globally.</p> <p>Describe the stages in the natural history of a disease.</p> <p>Describe epidemiological triad, web of causation and multifactorial causation</p> <p>Describe the dimensions and determinants of health</p> <p>Describe the indicators of health and its characteristics</p> <p>Discuss the concept of disease control</p> <p>Discuss the different levels of prevention and</p>	2	IL

		<p>their modes of interventions.</p> <p>Explain the natural history of disease.</p> <p>Describe the iceberg phenomenon</p> <p>Describe mode of intervention of diseases with emphasis on health education</p>		
4	Primary Health Care	<p>Define Primary health care (PHC).</p> <p>Describe the elements of PHC, its principles and strategies for implementation of PHC.</p> <p>Describe Health for all by the year 2000.</p> <p>Enumerate the MDGS &amp; SDGS related to health.</p>	I	IL
		<p>Describe the history of development of PHC</p> <p>Describe comprehensive &amp; selective PHC</p> <p>Describe reasons for failure of PHC</p> <p>Describe Health Systems before &amp; after PHC</p> <p>Describe district health care system</p> <p>Enumerate indicators for assessing PHC.</p>		
	<b>SUBJECT: PRIME</b>			
1	Personal Identity Professional identity	<p>Describe personal identity in the context of medical education</p> <p>Define professional identity and Describe the basic pre-requisites of professional identity formation</p>	I	IL
2	Patient safety, clinical governance and quality improvement	<p>Explain the concept of patient safety, clinical governance and quality improvement in primary healthcare</p>	I	IL
3	Professionalism-Trust	<p>Explain the dynamics of professionalism and trust in health professional patient relationship</p> <p>Adheres to principles of trust in day to day professional interactions</p>	I	IL
	Professional identity formation Types and Multiple identities	<p>Define professional identity formation and explain the Students' roles in terms of professional identity</p>		
4	Motivation	<p>Explain motivational skills for team members for clinical tasks</p>	I	IL

### Theme-2 (Aging and Death)

SN O	Subject: PATHOLOGY	Learning Outcomes	hours	MIT
1	Cellular injury, cell death	<p>Define the following terms: Pathology, disease, etiology, pathogenesis, morphology, cell injury and homeostasis. Describe the causes of cell injury from gross physical trauma to single gene defect. Describe the nature and severity of cell injury with cellular responses. Enumerate different classes of pathology.</p> <p>Describe the following basic mechanisms of cell injury: General Biochemical mechanisms, Ischemic and hypoxic injury, Ischemic/reperfusion injury, Free radical induced cell injury and chemical injury. Differentiate between reversible and irreversible cell injury. Describe the mechanism, morphological and biochemical changes and functional alterations in reversible and irreversible cell injury.</p>	2	IL
		<p>Define phagocytosis, endocytosis, pinocytosis, autophagy and heterophagy. Describe the subcellular responses to injury including lysosomal catabolism, heterophagy and autophagy.</p>		
2	Cellular adaptation	<p>Describe types of cellular adaptations. Differentiate between physiologic and pathologic adaptation. Define hypertrophy, hyperplasia, atrophy and metaplasia. Describe the causes and mechanism of hypertrophy, hyperplasia, atrophy and metaplasia. Describe hypertrophy of the smooth endoplasmic reticulum with examples and mitochondrial alterations. Describe cytoskeletal abnormalities in pathological states with examples.</p>	1	IL
3	Necrosis	<p>Define necrosis. Describe types of necrosis with examples. Describe the mechanism and morphology of necrosis.</p>	1	IL
	Apoptosis	<p>Define apoptosis. Describe physiological and pathological causes of apoptosis with examples. Describe morphology with alterations in cell structure.</p>		



		Describe the biochemical features of apoptosis altering the cell structure. Describe the intrinsic and extrinsic pathways of apoptosis. Differentiate between necrosis and apoptosis.		
		Describe role of apoptosis in health and disease. Describe the mechanism and causes of cellular ageing including genetic & environmental factors, structural & biochemical changes. Describe adaptive changes in clinical settings.		
4	Steatosis	Describe causes and mechanism of steatosis. Explain the morphology and consequences of steatosis.	<i>I</i>	<i>IL</i>
	Intracellular accumulations	Describe three general pathways for abnormal intracellular accumulations. Define steatosis. Describe causes, mechanism, morphology and consequences of lipid accumulation. Describe causes, mechanism, morphology, consequences of protein and glycogen accumulation Describe types of pigments Differentiate between endogenous and exogenous pigments.		
	Pathologic calcification	Define Pathologic calcification Describe types, morphology and functional alterations of pathologic calcification with examples. Differentiate between dystrophic and metastatic calcification.		
	<b>SUBJECT: FORENSIC MEDICINE &amp; TOXICOLOGY</b>			
1	Introduction to Thanatology; Death	Define death and describe its phases. Describe criteria of diagnosis of death. Enlist the importance of diagnosis of death	<i>I</i>	<i>IL</i>
		Describe the medicolegal aspects of brain stem death and suspended animation Define cause, mode, manner and mechanism of death Enlist various methods of disposal of dead body		
2	Death certificate	Define cause of death Describe the WHO format of death certificate	<i>I</i>	<i>IL</i>
	<b>Subject: OPHTHALMOLOGY</b>			
1	Cataracts	Define cataract	<i>I</i>	<i>IL</i>

		Describe the types of cataracts Describe the pathogenesis and complications of cataracts Describe the management of cataracts		
	<b>SUBJECT: PRIME Research</b>			
1	Research Protocol	Describe the steps of developing a research protocol	<i>I</i>	<i>IL</i>
2	Health system research	Define research and health system research. List types of research. Describe characteristics of health system research. Describe building blocks of health system. Discuss key areas of concern in health system. Discuss briefly research methodology.	<i>I</i>	<i>IL</i>
3	Purpose and process of health research	Define and categorize types of health research Explain the purpose of health research	<i>I</i>	<i>IL</i>
	<b>SUBJECT: FAMILY MEDICINE</b>			
1	History and current structure of general practice	Describe the historical perspectives of general practice Explain the structure of general practice nationally and internationally	<i>I</i>	<i>IL</i>
	Models of healthcare	describe the models of healthcare		
	Essential healthservice package (levels of health services in KP)	Describe the levels of health services in the province of KP.		
<b>PRACTICALS</b>				
	<b>SUBJECT: Pharmacology</b>			
1	Lab protocols; Introduction to Pharmacy; Apparatus used in Pharmacy	Identify and name common apparatus used in pharmacy laboratory. Identify and label common apparatus used in the field of Pharmacy.	1.5	
2	Metrology & Medical abbreviations	Define metrology. Describe metric and imperial systems of measurements. Calculate the equivalency of metric system with imperial system.	<i>1.5</i>	

		Describe the common medical abbreviations. Apply these abbreviations correctly in medical documentations.		
3	Dosage forms of drugs	Define dosage form. Enlist the types of dosage forms. Describe the characteristic properties of each dosage form. Identify dosage forms administered through different routes.	1.5	
4	Searching information in a formulary	Define formulary. Describe National Formulary. Demonstrate searching accurate information quickly in a formulary.	1.5	
5	To demonstrate IM and IV injection of drugs on a dummy (manikin)	Describe the general protocols for IM and IV injection of a drug. Demonstrate standard protocols during administration of a drug through Intramuscular route. Demonstrate standard protocols during administration of an IV drug through Intravenous route.	1.5	
6	Prescription writing	Define a medical prescription. Describe the components of a prescription. Describe how to reduce medication errors. Define compliance to the prescribed treatment. Write down the basic format of drug prescription.	1.5	
	<b>SUBJECT: PATHOLOGY</b>			
1	Biosafety procedures/ Precautions in Microbiology Lab	Define sterilization and disinfection. Demonstrate steps of hand washing. Enlist various physical and chemical methods of sterilization and disinfection. Define biosafety and biosecurity.	1.5	
2	Tissue processing	Describe steps involved in tissue processing. Identify various tools/instruments involved in tissue processing and their indications. Demonstrate slide focusing.	1.5	
3	Gram staining	Describe principal and significance of Gram staining. Enlist steps of Gram staining. Demonstrate Gram staining procedure. Identify Gram positive and Gram-negative bacteria morphologically under the microscope.	1.5	
4	ZN staining	Describe principal and significance of ZN staining.	1.5	

		Enlist steps of ZN staining.		
		Demonstrate ZN staining procedure. Identify AFB and inflammatory cells microscopically.		
5	Culture media	Define terms like culture, bacterial colony, media, aerobe, anaerobe, agar, selective and differential. Describe classification of culture media.	1.5	
		Describe basic and enriched media, transport media, selective media and differential media. Describe preparation/ inoculation of culture media. Enlist ingredients, indications, important properties and organisms grown on various culture media.		
6	Bacterial motility	Enumerate motile bacteria Identify motile bacteria under the microscope	1.5	
7	Hyperplasia (BPH)	Define hypertrophy and hyperplasia. Differentiate between hypertrophy and hyperplasia.	1.5	
		Describe gross and microscopic morphology of BPH. Identify the slide of BPH.		
	Atrophy (Testicular atrophy)	Define atrophy Describe gross and microscopic features of atrophy over a slide of testicular atrophy as an example		
	Pathologic calcification	Describe causes and various types of calcification. Identify the slide.		
	<b>SUBJECT: FORENSIC MEDICINE &amp; TOXICOLOGY</b>			
1	Death certificate	Formulate death certificate based on WHO criteria	1.5	
2	Legal procedure	Doctor in a witness box- role play	1.5	
3	Recording of evidence	Recording of dying declaration	1.5	
4	Consent form	Take written informed consent for various procedures	1.5	

MIT:mode of information transfer. E.g. lecture, SGD, DSL, Practical, skill lab etc etc



## 10 Learning Opportunities and Resources

### 10.1 Books:

Subjects	Textbooks
<b>Community Medicine</b>	1. Community Medicine by Parikh 2. Community Medicine by M Illyas 3. Basic Statistics for the Health Sciences by Jan W Kuzma
<b>Forensic Medicine</b>	1. Nasib R. Awan. Principles and practice of Forensic Medicine 1st ed. 2002. 2. Parikh, C.K. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology. 7th ed. 2005. 3. Knight B. Simpson's Forensic Medicine. 11th ed. 1993. 4. Knight and Pekka. Principles of forensic medicine. 3rd ed. 2004 5. Krishan VIJ. Text book of forensic medicine and toxicology (principles and practice). 4th ed. 2007 6. Dikshit P.C. Text book of forensic medicine and toxicology. 1st ed. 2010 7. Polson. Polson's Essential of Forensic Medicine. 4th edition. 2010. 8. Rao. Atlas of Forensic Medicine (latest edition). 9. Rao. Practical Forensic Medicine 3rd ed, 2007. 10. Knight: Jimpson's Forensic Medicine 10th 1991, 11th ed. 1993 11. Taylor's Principles and Practice of Medical Jurisprudence. 15th ed. 1999
<b>Pathology</b>	1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD
<b>Pharmacology</b>	1. Lippincott Illustrated Pharmacology 2. Basic and Clinical Pharmacology by Katzung

### 10.2 Website:



<https://www.medscape.com>

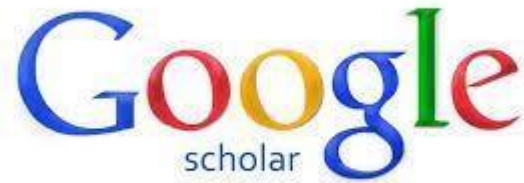


<https://www.PathologyOutlines.com>



National  
Library  
of Medicine 

<https://pubmed.ncbi.nlm.nih.gov>



<https://scholar.google.com>



<https://medlineplus.gov>



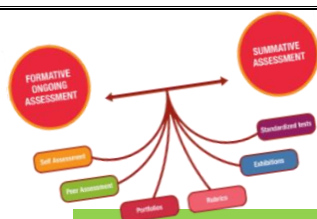
Yong Loo Lin  
School of Medicine

<https://medicine.nus.edu.sg/pathweb>

<https://www.webpathology.com/>

<https://webpath.med.utah.edu/>

<https://www.pathologyatlas.ro/>



## 11 Examination and Methods of Assessment:

### 11.1 Introduction:

3<sup>rd</sup> year will be assessed in three blocks

Block G

Block H

Block I

Paper G has total of 268 marks, with 120 marks for theory and 120 marks for OSPE and 28 marks for internal assessment. Summative Assessment consists of Modular Exam. Module exam will be assessed by any of the following assessment methods:

- MCQ
- SEQ
- OSPE

Annual Exam is cumulative of:

- Internal Evaluation = 10%
- Final Exam= 90%

Theory: MCQs, SEQs Practical: Viva & OSPE

### 11.2 Internal:

Internal assessment has 14 marks each for theory and for Ospe in block G

### 11.3 University Exam:

### 11.4 Total marks distribution- 3<sup>rd</sup> Year MBBS

**Table-1 ASSESSMENT PLAN OF 3<sup>RD</sup> YEAR**

THEORY PAPER	MODULES	THEORY MARKS	INTERNAL Assessment theory(10%)	OSPE/ OSCE	Internal assessment OSPE (10%)	Total marks
<b>Paper G</b>	Foundation-II	120	14	120	14	268
	Inf. & inflammation					
<b>Paper H</b>	Multisystem	120	13	120	14	267
	Blood					
	MSK					
<b>Paper I</b>	CVS-II	120	13	120	12	265
	Respiratory-II					
<b>Total Marks</b>		<b>360</b>	<b>40</b>	<b>360</b>	<b>40</b>	<b>800</b>

**Paper-G (Foundation 2 and Infection and Inflammation)****Table-2 --- MCQS**

Subject	Foundation 2 module	Infection and Inflammation module	Total MCQs
Pharmacology	19	20	39
Pathology	12	23	35
Forensic medicine	6	08	14
Community medicine	5	10	15
ENT	1	03	04
Eye	3	02	05
PRIME including Research	1+2 (3)	0	03
Medicine	0	01	01
Surgery	0	02	02
Gynaecology	0	01	01
Pediatrics	0	01	01
<b>Total</b>	<b>49</b>	<b>71</b>	<b>120</b>

**Table-3 OSPE**

Subject	OSPE/OSCE	Viva stations	Total *
Pharmacology	2	2	4
Pathology	5	2	7
Forensic medicine	2	2	4
Community medicine	1	2	3
Medicine (history and physical examination)	1	0	1
Surgery (history and physical examination)	1	0	1
<b>Total</b>	<b>12</b>	<b>8</b>	<b>20</b>

- A minimum of 20 stations will be used in final exams. Total marks will be 120 (6 marks for each station).



## 12 Tentative Timetables

**SWAT MEDICAL COLLEGE, SWAT**  
 Department of Medical Education  
 Time Table **3<sup>rd</sup> Year MBBS**  
 Class Session 2024-25  
**Block-G: (Foundation-II Modules)**  
 Week-1)

- Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:00PM – 01:30 PM	01:30PM 03:00PM
<b>Monday 12/02/2024</b>	<b>Off day</b>				
<b>Tuesday 13/02/2024</b>	<b>F.M - L 1</b> Introduction, branches of F.M <b>Dr. Younas</b>	<b>Patho - L 1</b> Introduction to the subject/ Introduction to cell <b>Dr. Shabir Ahmed</b>	<b>Hospital work</b>	<b>Practical</b> Patho Group A <b>Dr. Ayaz</b> Pharma Group B ( <b>Dr. Faiza</b> ) F.M Group C <b>Dr. Azmatullah</b>	<b>Pharma - L 1</b> Introduction to the subject, Nomenclature of drugs <b>Prof. Dr. Zahid Iqbal</b>
<b>Wednesday 14/02/2024</b>	<b>C.M - L 1</b> Introduction to the subject <b>Prof.Dr.Sartaj Khan</b>	<b>PRIME - L1</b> Research-I <b>Prof.Dr.Zahid Iqbal</b>		<b>Practical</b> Patho group C <b>Dr. Ayaz</b> Pharma Group A <b>Dr Faiza</b> F.M Group B <b>Dr.Azmat</b>	<b>Pharma - L 2</b> Sources of Drugs <b>Prof. Dr.Zahid Iqbal</b>
<b>Thursday 15/02/2024</b>	<b>EYE - L1</b> Ophthalmology and its Branches <b>Prof. Dr. Haroon Rashid</b>	<b>Patho - L2</b> Structure of bacteria cell <b>Prof. Dr. Shah Jehan</b>		<b>Practical</b> Patho group B <b>Dr. Ayaz</b> Pharma Group C <b>Dr. Faiza</b> F.M Group A <b>Dr. Azmat</b>	<b>Patho - L 3</b> Bacterial vaccines <b>Dr. AurangZeb Khan</b>
<b>Friday 16/02/2024</b>	<b>Patho – L 4</b> Classification of bacterial cell <b>Prof. Dr. Shah Jehan</b>	<b>Pharma - L 3</b> Routes of Drug Administration <b>Dr.Rahman Shah</b>	<b>10-11am</b>  <b>Patho - L5</b> Cell injury & its causes <b>Dr.Bilal</b>	<b>11am- 12pm</b>  <b>ENT - L 1</b> Common ENT Symptoms <b>Dr. Bakht Taj</b>	<b>Prayers break</b>  <b>SDL</b>

Whole module timetable with tentative dates

# SWAT MEDICAL COLLEGE, SWAT

Department of Medical Education

Time Table 3<sup>rd</sup> Year MBBS

Class Session 2024-25

Block-G: (Foundation-II Modules)

Week-2)

- Day/Date	08:00A M - 09:00A M	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
<b>Monday</b> 19/02/2024	<b>Patho - L6</b> Mechanism of Cell injury <b>Prof. Dr.</b> <b>Mukammil</b> <b>Shah</b>	<b>Pharma - L 4</b> Absorption of Drugs <b>Prof.Dr.Zahi</b> <b>d Iqbal</b>	<b>Hospita</b> <b>l work</b>	<b>C.M - L 2</b> Health and Diseases <b>Prof. Dr. Sartaj</b> <b>Khan</b>	<b>Prayer</b> <b>Break</b>	<b>Practical</b> Patho group A <b>Dr. Hassaan</b> Pharma Group <b>B Dr. Fiaza</b> F.M Group C <b>Dr.</b> <b>Azmatullah</b>
<b>Tuesday</b> 20/02/2024	<b>EYE - L 2</b> Refractive errors <b>Prof. Dr.</b> <b>Haroon</b> <b>Rashid</b>	<b>Patho – L 7</b> Mutation (types) conjugation, Transduction <b>Dr. Sehrish</b>		<b>Pharma – L5</b> Bioavailabilit y and Bioequalance <b>Prof. Dr. Zahid</b> <b>Iqbal</b>		<b>Practical</b> Patho group C <b>Dr. Hassaan</b> Pharma Group <b>A Dr. Fiaza</b> F.M Group B <b>Dr.</b> <b>Azmatullah</b>
<b>Wednesda</b> <b>y</b> 21/02/2024	<b>Pharma - L</b> <b>6</b> Distribution of drugs and volume of distribution <b>Prof. Dr.</b> <b>Zahid Iqbal</b>	<b>F.M - L3</b> Law and code of Medical ethics <b>Dr. Younus</b> <b>Khan</b>		<b>Pharma - L7</b> Loading dose & maintenance dose and Physiological barrios to transport of drugs <b>Dr. Zeeshan</b> <b>Saif</b>		<b>Practical</b> Patho group B <b>Dr. Hassaan</b> Pharma Group <b>C Dr. Fiaza</b> F.M Group A <b>Dr.</b> <b>Azmatullah</b>
<b>Thursday</b> 22/02/2024	<b>F.M - L4</b> Medicolegal System and Types <b>Dr.</b> <b>Azmatullah</b>	<b>Pharma - L 8</b> Biotransformatio n (metabolism) of drugs <b>Dr.Zeeshan</b>		<b>PRIME - L2</b> Personal and Professional Identity <b>Dr.Ubaidullah</b>		<b>SDL</b> (SLRC/Librar y)
<b>Friday</b> 23/02/2024	<b>Patho - L 8</b> Necrosis, types and its mechanism <b>Prof.Dr.</b> <b>Mukammil</b> <b>Shah</b>	<b>ENT - L 1</b> Common ENT Symptoms <b>Dr. Bakht Taj</b>		<b>C.M - L3</b> Preventive Medicine functions regionally & globally <b>Prof. Dr.</b> <b>Sartaj Khan</b>		<b>DSL C.M</b> Revision <b>Prof.Dr.Sartaj</b> <b>Khan</b>

# SWAT MEDICAL COLLEGE, SWAT

Department of Medical Education

Time Table 3<sup>rd</sup> Year MBBS

Class Session 2024-25

Block-G: (Foundation-II Modules)

Week-3

- Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM - 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
<b>Monday 26/02/2024</b>	<b>Pharma – L 9</b> Excretion of drugs, drug clearance and half life <b>Dr. Zeeshan Saif</b>	<b>Patho – L 9</b> Sterilization <b>Dr. Sehrish</b>	<b>Hospital work</b>	<b>Pharma - L 10</b> First order and zero order kinetics and steady state concentration <b>Dr. Rehman Shah</b>	<b>Prayer Break</b>	<b>Practical</b> Patho group A (Dr.Ayyaz) Pharma Group B (Dr.Haseena Rafi) F.M Group C <b>Dr.</b> (Azmatullah)
<b>Tuesday 27/02/2024</b>	<b>EYE - L3</b> Watery eyes <b>Prof.Dr. Haroon Rashid</b>	<b>F.M - L5</b> Relevant sections of Pakistan penal code and CrPC <b>Dr. Hidayat Ur Rehman</b>		<b>PRIME - L3</b> Motivation <b>Dr.Ubaidullah</b>		<b>Practical</b> Patho group C (Dr.Ayyaz) Pharma Group A (Dr.Haseena Rafi) F.M Group B (Dr. Azmatullah)
<b>Wednesday 28/02/2024</b>	<b>SDL</b> (SLRC/Library)	<b>F.M - L 6</b> Court procedures <b>Dr. Hidayat ur Rehman</b>		<b>DSL Pharma</b> <b>Dr. Safeena</b>		<b>Practical</b> Patho group B (Dr. Ayyaz) Pharma Group C (Dr.Haseena Rafi) F.M Group A (Dr. Azmatullah)
<b>Thursday 29/02/2024</b>	<b>F.M - L 7</b> Evidence Type and Recording <b>Dr. Azmatullah</b>	<b>Pharma - L 11</b> Pharmacodynamics <b>Dr. Rahman Shah</b>		<b>Patho - L 10</b> Apoptosis <b>Dr. Shabir Ahmad</b>		<b>DSL F.M</b> <b>Dr Raheela Haroon</b>
<b>Friday 01/03/2024</b>	<b>SDL</b> (SLRC/Library)	<b>Patho – L 11</b> Necrosis, types and its mechanism <b>Prof.Dr. Mukammil Shah</b>		<b>C.M - L 4</b> Epidemiological triad, web of causation and multifactorial causation <b>Prof.Dr.Sartaj Khan</b>		<b>C.M - L 5, L 6</b> Stages of Disease Disease Control Levels of Prevention Modes of Interventions <b>Prof.Dr.Sartaj Khan</b>

# SWAT MEDICAL COLLEGE, SWAT

Department of Medical Education

Time Table 3<sup>rd</sup> Year MBBS

Class Session 2024-25

Block-G: (Foundation-II Modules)

Week-4

- Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
<b>Monday</b> 04/03/2024	<b>Pharma - L 12</b> Dose response curves and therapeutic index <b>Dr.Rahman Shah</b>	<b>SDL</b> (SLRC/Librar y)	<b>Hospita l work</b>	<b>Patho - L 12</b> Steatosis <b>Dr.AurangZ eb Khan</b>	<b>Prayer Break</b>	<b>Practical</b> Patho group <b>ADr Ayaz</b> Pharma Group <b>B (Dr. Safeena)</b> F.M Group <b>CDr.</b> <b>Azmatullah</b>
<b>Tuesday</b> 05/03/2024	<b>EYE – L4</b> Cataracts <b>Prof.Dr.Haro on Rashid</b>	<b>Pharma - L 13</b> Drug interactions, Drug antagonism, Tolerance and Tachyphylaxis, Adverse drug reactions <b>Dr. Zeeshan Saif</b>		<b>F.M - L 8</b> Laws in relation to medical practice <b>Dr.Younus</b>		<b>Practical</b> Patho group <b>CDr.Ayaz</b> Pharma Group <b>A (Dr Safeena)</b> F.M Group <b>BDr.</b> <b>Azmatullah</b>
<b>Wednesday</b> 06/03/2024	<b>F.M L - L 11</b> Secrecy, Professional Misconduct <b>Dr.Hidayat Ur Rahman</b>	<b>Pharma - L 15</b> Drug receptors <b>Dr. Rehman Shah</b>		<b>Patho - L 13</b> Bacteria growth Curve/Normal Flora <b>Prof.Dr.Shah Jehan</b>		<b>Practical</b> Patho group <b>BDr.Ayaz</b> Pharma Group <b>C (Dr. Safeena)</b> F.M Group <b>ADr.</b> <b>Azmatullah</b>
<b>Thursday</b> 07/03/2024	<b>F.M - L 9</b> Consent and its types <b>Dr. Hidayat Ur Rehman</b>	<b>C.M - L 7</b> History of Disease Iceberg Phenomenon <b>Prof. Dr. Sartaj Khan</b>		<b>C.M - L 8</b> Intervention of Diseases with Emphasis on Health Education <b>Prof.Dr.Sart aj Khan</b>		<b>DSL F.M</b> <b>Dr. Raheela</b>
<b>Friday</b> 08/03/2024	<b>Pharma - L 14</b> Basic Mechanisms of Drug Action <b>Dr. Fawad Khalid</b>	<b>F.M L 12</b> Describe Privileged Communication <b>Dr. Shahkar</b>	<b>Patho - L 14</b> Classification Pigment <b>Prof.</b> <b>Dr.Imran Uddin</b>			<b>DSL PHARMA</b> <b>Dr. Safeena</b>

# SWAT MEDICAL COLLEGE, SWAT

Department of Medical Education

Time Table 3<sup>rd</sup> Year MBBS

Class Session 2024-25

**Block-G: (Foundation-II Modules)**

**Week-5**

Week 5						
- Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM 01:30PM	01:30PM 03:00PM
Monday 11/03/2024	Patho - L 15 Endotoxin & Exotoxin Dr.Sehrish	F.M - L 10 Negligence and Types (Describe) Dr.Azmatullah	Hospital work	Prime - L 6 Patient Safety clinical governance and quality improvement Dr.Ubaidullah	Prayer Break	Practical Patho group A (Dr.Hassan) Pharma Group B (Dr.Faiza) F.M Group CFeedback
Tuesday 12/03/2024	Patho - L 16 Cellular Adaptation Dr. Bilal Iqbal	Pharma - L 1 New drug development Prof.Dr.Zahid Iqbal		PRIME - L 4 Research -I Prof.Dr.Zahid Iqbal		Practical Patho group C (Dr.Hassan) Pharma Group A (Dr.Faiza) F.M Group BFeedback
Wednesday 13/03/2024	PRIME - L 5 Research-II Prof.Dr.Zahid Iqbal	F.M - L 13 Death and its Phases Dr.Shahkar Ali Khan		Patho - L 17 Lab Diagnosis of Bacterial Infection Prof.Dr.Shah Jehan		Practical Patho group B (Dr.Hassan) Pharma Group C (Dr.Faiza) F.M Group AFeedback
Thursday 14/03/2024	Preparatory			Leave		
Friday 15/03/2024	End of module test					

### 13 For inquiry and troubleshooting



**Please contact**

*Dr. Younas Khan*

*Forensic Medicine & Toxicology*

*Block Coordinator*

+92 335 9439240

## 14 Module Evaluation Form

*This is an example of feedback form and real-time feedback will be obtained through an electronic link and/or your LMS.*

MBBS Year: \_\_\_\_\_ Block: \_\_\_\_\_ Module: \_\_\_\_\_

Date: \_\_\_\_\_

**1. (Unsatisfactory)    2 (Fair)                      3 (Satisfactory)                      4 (Good)                      5 (Excellent)**

**Category: Course Contents**

No.	Question	1	2	3	4	5
1	To what extent did the course contents align with the stated learning objectives of the module?					
2	How clear and comprehensive were the course materials provided in this module?					
3	Were the core topics adequately covered, ensuring a well-rounded understanding of the subject?					
4	How current and up-to-date were the course contents in reflecting recent advancements?					
5	Did the module incorporate real-world applications and case studies effectively?					

**Category: Learning Resources**

6	Were the learning resources (e.g., textbooks, online materials, laboratory facilities) readily available and easily accessible?					
7	How helpful were additional learning resources such as supplementary readings or multimedia content?					
8	Did the module offer adequate support for research and independent study?					
9	Were digital resources and online platforms effectively utilized to enhance the learning experience?					
10	Were there sufficient opportunities for hands-on practice and practical application of knowledge?					

**Category: Teaching Methods**

11	How well did instructors engage with students and create a supportive learning environment?					
12	Were diverse teaching methods (e.g., lectures, group discussions, simulations) effectively employed?					

13	How responsive were instructors to questions, concerns, and feedback from students?					
14	To what extent did instructors provide timely and constructive feedback on assignments and assessments?					
15	Were opportunities for collaborative learning and peer-to-peer interactions encouraged and facilitated?					
<b>No.</b>	<b>Category: Engagement and Motivation</b>					
16	To what extent did the module use real-world examples and practical applications to engage students?					
17	How well were active learning techniques (e.g., problem-solving, case studies) integrated into the curriculum?					
18	Did the module provide opportunities for students to pursue their individual interests within the subject matter?					
19	Were assessments designed to challenge and motivate students to excel in their studies?					
	<b>Category: Inclusivity and Diversity</b>					
20	How well did the module accommodate different learning styles and preferences among students?					
21	Were efforts made to include diverse perspectives, cultures, and backgrounds in the curriculum?					
22	How effectively were accommodations provided for students with varying levels of prior knowledge?					
	<b>Category: Overall</b>					
<b>No.</b>	<b>Question</b>	<b>1 (Very Poor)</b>	<b>2 (Poor)</b>	<b>3 (Fair)</b>	<b>4 (Good)</b>	<b>5 (Excellent)</b>
23	How would you rate the overall quality of this module?					



## 15 Students Diary/Notes

[illegible]

PROGRESS: \_\_\_\_\_

ACHIEVEMENT: \_\_\_\_\_