

# AYUB MEDICAL COLLEGE ABBOTTABAD

DEPARTMENT OF MEDICAL EDUCATION



# INFLAMMATION & INFECTION I

**3<sup>RD</sup> YEAR MBBS**

**BLOCK: G**

**CLASS OF 2023**

**DURATION: 06 WEEKS**

STUDENT NAME

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**DISCLAIMER**

- Developing a study guide is a dynamic process and undergoes iteration according to the needs and priorities.
- This study guide is subjected to the change and modification over the whole academic year.
  - However, students are advised to use it as a guide for respective modules.
- It is to declare that the learning objectives (general and specific) and the distribution of assessment tools (both theory and practical) are obtained from Khyber Medical University, Peshawar. These can be obtained from:  
<https://kmu.edu.pk/examination/guidelines>
- The time tables are for guiding purpose. It is to advise that final timetables are always displayed over the notice boards of each lecture hall.

Students are encouraged to provide feedback via coordinator.

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## 1 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Umar Farooq		CEO & Dean
2.	Prof. Dr. Irfan U. Khattak		Director DME
<b>Module Team</b>			
3.	Dr.Jamila Farid	Pathology	Block Coordinator
4.	Dr.Wajid Ali	Pharmacology	Member
5.	Dr.Omair Khan	Forensic Medicine	Member
6.	Dr.Rizwana	Community Medicine	Member
7.	Dr.Rashid Ali	Medicine	Member
8.	Dr.Kashif	Surgery	Member
9.	Dr.Saima Bibi	Peadiatrics	Member
10.	Dr.Saadia Irum	Gynae	Member
11.	Dr.Bushra Aqil	Eye	Member
12.	Dr.Imran Shah	ENT	Member
13.	Dr.Tahir Hussain Shah	Psychaistry	Member

## 2 What Is A Study Guide?

It is an aid to Inform students how student learning program of the module has been organized, to help students organize and manage their studies throughout the module and guide students on assessment methods, rules and regulations.


### 2.1 The study guide:

- Communicates information on organization and management of the module.
- This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings.

### 2.2 Module objectives.

- Provides a list of learning resources such as books, computer-assisted learning programs, weblinks, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's performance.

### 2.3 Achievement of objectives.

-  Focuses on information pertaining to examination policy, rules and regulations.

**STUDENTS WILL EXPERIENCE INTEGRATED CURRICULUM**



### 3 Recommended List Of Icon



**Introduction To Case**



**For Objectives**



**Critical Questions**



**Assessment**



**Resource Material**

## 4 Organization of Module

### 4.1 Introduction:

Infectious diseases is a serious public health problem in the 21st century and has been classified as the second leading cause of death with approximately 15 million deaths worldwide every year according to WHO . Infections like HIV/AIDS, tuberculosis, and malaria have been nicknamed the 'big three' because of their important impact on global human health. Pakistan is one of several countries, which together bear 95% of the burden of infectious diseases. Pakistan is ranked fifth out of twenty-two on the list of high-burden tuberculosis countries. Alarming averages of about one million lives are also claimed yearly by malaria. Pakistan is one of the two remaining countries where polio is still endemic. Hence, it is important to spread knowledge and information on the importance of immunization to the general public. Other factors such as overcrowding, poor hand washing practices and lack of effective prescriptions contribute to further worsening the situation. An estimated 32% of general practitioners in Pakistan fail to administer the proper medication thus increasing the disease burden.

### 4.2 Rationale

It is important for 3rd year medical students to enhance their existing knowledge of the infectious diseases prevalent in our country, and build greater understanding and ability to recognize signs and symptoms, and relate with appropriate investigations, and therapeutics. Students will experience orientation to history taking, professional behaviors and issues related to healthcare associated infections. Clinical orientation at MTI AMI along with community medicine experience will help students to value the concepts of preventive medicine and experience general public health issues with the cost effective measures taken to treat long standing illnesses.



## 5 Learning Objectives

### 5.1 General Learning Outcomes

**At the end of this module, the 3<sup>rd</sup> year students would be able to:**

1. Describe the process of acute & chronic inflammation with their outcomes
2. Relate different aspects of healing and repair
3. Differentiate common pathogenic bacteria based on morphology, pathogenesis & lab diagnosis.
4. Relate bacterial pathogenic factors to clinical manifestations of common infectious diseases.
5. Describe the pharmacological details of anti-inflammatory drugs
6. Apply/relate the pharmacokinetics & pharmacodynamics of chemotherapeutic agents to their use in infectious diseases
7. Construct / Write prescriptions for various inflammatory and infectious diseases
8. Describe medico legal aspects of HIV patient.
9. Describe mechanism of wound causation.
10. Describe medico legal aspects of parameters used for personal identification in real life situation
11. Apply parameters of a person's identification in a simulated environment
12. Describe the epidemiology of common infectious diseases.
13. Explain the preventive and control measures for infectious diseases.
14. Explain the control & preventive measures for nosocomial infections.
15. Describe the risks associated with hospital waste and its management.



Theme-1 (Pain and Fatigue)				
Subject	Topic	MIT	Hours	Learning objectives
Pharmacology	Overview to antiinflammatory drugs	Lecture	1	<ul style="list-style-type: none"> <li>-Classify anti-inflammatory drugs</li> <li>-Describe the role of DMARDs and glucocorticoids as anti-inflammatory agents</li> </ul>
	NSAIDs (Non-selective cox inhibitors: Aspirin & other commonly used NSAIDs)	Lecture	1	<ul style="list-style-type: none"> <li>-Classify NSAIDS</li> <li>-Differentiate between non-selective COXinhibitors and selective COX-2 inhibitors based on mechanism of action.</li> <li>-Name the prototype non-selective COX inhibitor.</li> <li>-Describe the pharmacokinetics of Aspirin</li> <li>-Describe the mechanism of action of aspirin as anti-platelet,analgesic, antipyretic and anti-inflammatory agent.</li> <li>-Give the dose of Aspirin as anti-platelet, analgesic/antipyretic and as anti-inflammatory drug.</li> <li>-Describe clinical uses of NSAIDs.</li> <li>-Describe the adverse effects of NSAIDs.</li> <li>-Describe the drug treatment of Aspirin poisoning</li> <li>-Describe the pharmacokinetics with emphasis on dosage, duration of action and elimination of Diclofenac, Ibuprofen, Indomethacin, Mefanamic acid and Piroxicam in contrast to Aspirin</li> <li>-Relate pharmacokinetics and pharmacodynamics of NSAIDs to their clinical applications</li> </ul>

	Selective COX-2 inhibitors	Lecture	1	<ul style="list-style-type: none"> <li>-Describe the mechanism of action of selective COX-2 inhibitors.</li> <li>-Describe the clinical uses of selective COX-2 inhibitors</li> <li>-Describe the adverse effects of selective COX-2 inhibitors</li> <li>-Describe the merits and demerits of selective COX-2 inhibitors and non-selective COX inhibitors.</li> <li>-Describe the pharmacokinetics of Paracetamol</li> <li>-Describe the mechanism of action of Paracetamol.</li> <li>-Describe the clinical uses of Paracetamol.</li> <li>-Describe the adverse effects of Paracetamol.</li> <li>-Give therapeutic and fatal doses of Paracetamol.</li> <li>-Describe the drug treatment of Paracetamol poisoning</li> </ul>
	Paracetamol (Acetaminophen)			
<b>Pathology</b>	Cells of Inflammation	Lecture	1	<ul style="list-style-type: none"> <li>-Describe different cells of inflammation</li> <li>-Describe the functions of various cells of inflammation</li> <li>- Enumerate different causes of leukopenia and leucocytosis (each neutrophil, lymphocyte, monocyte, eosinophil, basophil separately)</li> </ul>
	Overview to Acute Inflammation and vascular phase			

	Recognition of microbes	Lecture	1	<ul style="list-style-type: none"> <li>-Describe various molecular patterns and appropriate receptors used by the inflammatory cells to identify microbes</li> <li>-Relate the recognition of microbes to the initiation of inflammation</li> </ul>
	Cellular phase of acute inflammation	Lecture	1	<ul style="list-style-type: none"> <li>-Describe the sequence of events and cellular changes involved in cellular phase of acute inflammation</li> </ul>
	Plasma Derived Mediators	Lecture	1	<ul style="list-style-type: none"> <li>-Enumerate plasma derived mediators</li> <li>-Enlist the functions of each mediator</li> <li>-Describe the different cascades involved in the generation of mediators</li> </ul>
	Cell Derived Mediators			<ul style="list-style-type: none"> <li>-Enumerate cell derived mediators</li> <li>-Enlist the functions of each mediator</li> </ul>
<b>Theme (Pain and Fatigue)</b>				
Pharmacology	Anti-histamines	Lecture	2	<ul style="list-style-type: none"> <li>-Classify anti-histamines</li> <li>-Differentiate between first and second generation anti-histamines</li> <li>-Describe the pharmacologic effects of H1-receptor antagonists.</li> <li>-Describe the clinical uses of H1-receptor antagonists.</li> <li>-Enlist the adverse effects of H1-receptor antagonists.</li> <li>-Describe the drug interactions of H1-receptor antagonists.</li> </ul>
	Serotonin agonist and antagonist			<ul style="list-style-type: none"> <li>- Enlist serotonin agonists</li> <li>- Classify serotonin antagonists</li> <li>- Describe the mechanism of action of serotonin</li> <li>- Describe the organ system effects of serotonin.</li> <li>- Describe the clinical uses of serotonin agonists and antagonists</li> <li>- Describe the pharmacological basis of ondansetron in chemotherapy induced vomiting</li> </ul>

Pathology	Morphological patterns, outcomes, defects of inflammation	Lecture	1	<ul style="list-style-type: none"> <li>-Enumerate the different morphological patterns of inflammation</li> <li>-Describe the histological changes in each pattern</li> <li>- Enlist the outcomes of inflammation</li> <li>-Enumerate the various defects of inflammation</li> <li>-Describe the consequences of the defects of inflammation</li> </ul>	
	Overview to chronic inflammation	Lecture	1	<ul style="list-style-type: none"> <li>-Define chronic inflammation</li> <li>-Differentiate chronic from acute inflammation</li> <li>-Describe the causes and morphological features of chronic inflammation</li> </ul>	
	Granulomatous inflammation				Define granulomatous inflammation
					-Describe the morphological features and mediators involved in granulomatous inflammation
	Cells and mediators of chronic inflammation	Lecture	1	<ul style="list-style-type: none"> <li>-Enlist the cells of chronic inflammation</li> <li>-Enumerate the mediators of chronic inflammation</li> <li>-Describe the function of the mediators</li> <li>-Relate the functions of mediators to the morphological changes seen in chronic inflammation</li> </ul>	
	Systemic effects of inflammation				<ul style="list-style-type: none"> <li>-Enumerate the systemic effects of inflammation</li> <li>-Describe the pathophysiology of the systemic effects of inflammation</li> </ul>
Forensic Medicine	Antidotes	Lecture	1	<ul style="list-style-type: none"> <li>Define and classify antidotes</li> <li>Describe the mechanism of action of different antidotes</li> </ul>	
	Steps of management in a case of poisoning	Lecture	1	Describe general steps of management in a case of poisoning	

Community Medicine	Infectious disease epidemiology	Lecture	1	<ul style="list-style-type: none"> <li>• Define incubation period</li> <li>• Explain the principles of disease eradication and control</li> <li>• Define serial intervals</li> <li>• Define infectivity period</li> </ul>
	Infection control	Lecture	2	<ul style="list-style-type: none"> <li>• Define the basic definition related to infectious disease epidemiology</li> <li>• Review the role of susceptible host for successful parasitism, modes of transmission and the host defense system</li> <li>• List and explain the various classifications of communicable diseases with special reference to the scope and purpose of the International classification of Disease (ICD -10).</li> <li>• Enlist the common infectious diseases affecting the population of Pakistan as per National institute of Health Pakistan.</li> <li>• Explain the effect of climate change and seasonal variation on specific diseases globally and in Pakistan.</li> <li>• Explain the role of personal hygiene &amp; PPE in infection control.</li> </ul>
	<ul style="list-style-type: none"> <li>• Disease careers</li> <li>• Reservoirs of infection</li> <li>• Disinfection</li> <li>• Communicable disease control measure (aimed at agent, host, others, administrative</li> </ul>	Lecture	1	<ul style="list-style-type: none"> <li>• Define disease careers</li> <li>• Explain the reservoirs of infection</li> <li>• Differentiate between sterilization and disinfection</li> <li>• Explain the types and procedures of disinfection</li> <li>• Discuss Communicable disease control measure (aimed at agent, host, others, administrative measures and vector control measures</li> </ul>

	measures and vector control measures			
<b>Theme (Trauma and repair)</b>				
<b>Pathology</b>	Prostaglandins	Lecture	1	<ul style="list-style-type: none"> <li>- Enlist various prostaglandins-</li> <li>- Describe the mechanism of action of Prostaglandins.</li> <li>- Describe the organ system effects of Prostaglandins.</li> <li>- Describe the clinical uses of Prostaglandins.</li> </ul>
	Overview to tissue healing and repair	Lecture	1	<ul style="list-style-type: none"> <li>-Differentiate between regeneration and repair</li> <li>-Describe various steps involved in the process oftissue healing and repair.</li> </ul>
	Tissue regeneration	Lecture		<ul style="list-style-type: none"> <li>-Define regeneration</li> <li>-Enlist organs capable of regeneration</li> <li>-Describe the process and mediators involved in regeneration</li> </ul>

	Cell Cycle and its role in repair			<ul style="list-style-type: none"> <li>-Define cell cycle</li> <li>-Describe the initiation, various phases and proteins involved in the cell cycle</li> <li>-Discuss cells capable of entering the cell cycle</li> <li>-Describe proliferative capabilities of various cells</li> </ul>
	Repair by scarring			<ul style="list-style-type: none"> <li>-Describe the various steps involved in process of repair by scarring</li> <li>-Describe the various mediators involved in the steps of scarring</li> </ul>
	Growth factors and receptors	Lecture	1	<ul style="list-style-type: none"> <li>-enumerate various growth factors and their receptors</li> <li>-Describe the most common pathways by which growth factors affect tissue repair and regeneration</li> </ul>
	ECM			<ul style="list-style-type: none"> <li>-Classify various components of ECM</li> <li>-Describe the role and importance of ECM in tissue repair</li> </ul>
	Factors affecting wound healing/abnormal scarring			<ul style="list-style-type: none"> <li>-Enlist the various factors that influence wound healing</li> <li>-Describe the mechanism by which these factors affect wound healing</li> <li>-Describe the abnormalities of repair and their consequences</li> </ul>
<b>Forensic Medicine</b>	Overview to medico-legal aspects of trauma (Wound causation)	Lecture	1	Describe mechanism of wound causation
	Toxicity by analgesics	Lecture	1	Describe the medico legal aspects of toxicity by aspirin and paracetamol

Community Medicine	Nosocomial infection & its control	Lecture	1	<ul style="list-style-type: none"> <li>• Describe the prevalence of the nosocomial infections globally and Specifically in Pakistan.</li> <li>• Identify the cause of nosocomial infections in Pakistan.</li> <li>• Enlist common nosocomial infections.</li> <li>• Describe the importance of different modes of transmission for causation of the nosocomial infections.</li> <li>• Explain the control &amp; preventive measures for nosocomial infections</li> </ul>
<b>Theme (Fever and Infection)</b>				
	Introduction to Chemotherapy	Lecture	1	<ol style="list-style-type: none"> <li>1. Define basic terms like chemotherapy, antibiotic, antimicrobial, MIC, MBC, chemoprophylaxis, empirical therapy and post-antibiotic effect, bacteriostatic and bactericidal antimicrobials.</li> <li>2. Explain advantages of drug combinations.</li> <li>3. Describe various mechanisms of bacterial resistance against antibiotics.</li> <li>4. Differentiate between concentration and time dependent killing with examples.</li> <li>5. Classify antimicrobials on the basis of mechanism of action (MOA)</li> </ol>



Pharmacology	Penicillins	Lecture	2	<ol style="list-style-type: none"> <li>1. Classify beta-lactam antibiotics</li> <li>2. Enlist narrow and broad spectrum Penicillins.</li> <li>3. Enlist anti-pseudomonal, anti-staphylococcal/ beta lactamase resistant Penicillin.</li> <li>4. Enlist long- and short-acting Penicillins</li> <li>5. Describe anti-bacterial spectrum of Penicillins.</li> <li>6. Describe pharmacokinetics in respect of emphasis on route of administration and excretion of Penicillins</li> </ol>
				<ol style="list-style-type: none"> <li>7. Describe mechanism of action of Penicillins</li> <li>8. Describe clinical uses of Penicillins</li> <li>9. Describe adverse effects of Penicillins,</li> </ol>
				<ol style="list-style-type: none"> <li>10. Describe contraindications of Penicillins.</li> <li>11. Describe principal mechanism of bacterial resistance to Penicillins</li> <li>12. Describe drug interactions of Penicillins</li> <li>13. Apply formula for interconversion of milligrams and units of Penicillin G.</li> <li>14. Relate pharmacokinetics and pharmacodynamics of Penicillin with their clinical applications / uses.</li> </ol>

	Cephalosporins	Lecture	2	<ol style="list-style-type: none"> <li>1. Classify Cephalosporins</li> <li>2. Describe anti-bacterial spectrum of Cephalosporins.</li> <li>3. Describe pharmacokinetics of Cephalosporins with special emphasis on route of administration and excretion.</li> <li>4. Describe clinical uses of Cephalosporins</li> <li>5. Describe the adverse effects of Cephalosporins.</li> <li>6. Describe drug interaction of Cephalosporins with Ethanol.</li> <li>7. Describe the principal bacterial mechanism of resistance to Cephalosporins.</li> <li>8. Relate pharmacokinetics and pharmacodynamics of Cephalosporin with their clinical applications / uses.</li> </ol>
	Beta lactamase inhibitors	Lecture	1	<ol style="list-style-type: none"> <li>1. Enlist beta-lactamase inhibitors</li> <li>2. Explain the rationale for using beta lactamase inhibitors in combination with <math>\beta</math>-lactam antibiotics.</li> </ol>
	Monobactams & Carbapenem			<ol style="list-style-type: none"> <li>1. Describe the antibacterial spectrum of Monobactams and Carbapenem</li> <li>2. Describe the clinical uses of Monobactams and Carbapenem</li> </ol>
	Vancomycin			<ol style="list-style-type: none"> <li>1. Describe the MOA of Vancomycin.</li> <li>2. Describe clinical uses of Vancomycin</li> <li>3. Describe the use of vancomycin in MRSA (Methicillin-resistant Staph aureus).</li> <li>4. Describe adverse effects of Vancomycin</li> <li>5. Describe "Red man/Red neck" syndrome.</li> </ol>
	Fosfomycin Bacitracin &			<ol style="list-style-type: none"> <li>1. Enlist clinical uses of Fosfomycin, Bacitracin &amp; Cycloserine</li> </ol>

	Cycloserine			
	Protein synthesis inhibitors:			Classify bacterial protein synthesis inhibitors
	Tetracyclines	Lecture	1	<ul style="list-style-type: none"> <li>• Classify Tetracyclines.</li> <li>• Describe anti-bacterial spectrum of Tetracyclines.</li> <li>• Describe the pharmacokinetics of Tetracycline with special emphasis on absorption of Tetracyclines.</li> <li>• Describe mechanism of action of Tetracyclines.</li> <li>• Describe the principal mechanism of resistance to Tetracyclines.</li> <li>• Describe clinical uses of Tetracyclines.</li> <li>• Describe adverse effects of Tetracyclines</li> <li>• Describe Black Bone disease.</li> <li>• Describe the teratogenic effects of Tetracyclines.</li> <li>• Describe drug interactions of Tetracyclines.</li> <li>• Describe the adverse effect related to the use of outdated (expired) Tetracycline products.</li> <li>• Relate pharmacokinetics and pharmacodynamics of Tetracycline with their clinical applications/ uses.</li> </ul>
<b>Pathology</b>	Bacteria: Pyrogenic Bacteria	Lecture	4	<ul style="list-style-type: none"> <li>-Define boil and furuncle</li> <li>-Enlist organisms responsible for pyrogenic infections</li> <li>-Describe important properties, pathophysiology, lab diagnosis of GPC &amp; GNC</li> </ul>
	Bacteria: Rickettsia	Lecture	1	<ul style="list-style-type: none"> <li>-Define Rickettsia</li> <li>-Describe the important properties, pathophysiology, lab diagnosis of diseases caused by Rickettsia</li> </ul>

	Spore forming GProds	Lecture	3	-Enumerate spore forming GP rods  - Describe the important properties, pathophysiology, clinical features and lab diagnosis of spore forming GP rods
	Non Spore forming GP rods			Enumerate non spore forming GP rods
				- Describe the important properties, pathophysiology, clinical features and lab diagnosis of non-spore forming GP rods
	Chlamydia	Lecture	1	Describe the important properties, pathophysiology, clinical features and lab diagnosis of chlamydia.
	Miscellaneous Sepsis and Septic Shock	Lecture	1	-Define sepsis and septic shock -Enlist organisms capable of causing sepsis and inducing septic shock -Describe the pathophysiology and clinical features of septic shock
	Zoonotic Infections	Lecture	2	-Enlist organisms causing zoonotic infections -Describe the important properties, pathophysiology, clinical features and lab diagnosis of different zoonotic diseases
	General outlines of identification	Lecture	2	Describe methods and parameters of identification
	Fetal age determination			Write important physical developmental stages of fetus for age estimation
	Age determination by skeletal study			Write important skeletal points of age estimation
	Age estimation by dental study			Write important dental points for age estimation
	Ages of medico legal			Enlist important ages of legal significance

	significance			
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Theme (Fever and Infection)				
Pharmacology	Aminoglycosides	Lecture	1	<ul style="list-style-type: none"> <li>• Enlist Aminoglycosides.</li> <li>• Describe anti-bacterial spectrum of Aminoglycosides.</li> <li>• Describe the pharmacokinetics of Aminoglycosides with special emphasis on route of administration, concentration- dependent killing and post-antibiotic effect.</li> <li>• Describe mechanism of action of Aminoglycosides.</li> <li>• Describe the principal mechanism of resistance to Aminoglycosides.</li> <li>• Describe clinical uses of Aminoglycosides.</li> <li>• Describe adverse effects of Aminoglycosides.</li> <li>• Describe the drug interactions</li> </ul>

				<p>ofAminoglycosides.</p> <ul style="list-style-type: none"> <li>• Relate pharmacokinetics and pharmacodynamics of Aminoglycosides with their clinical applications / uses.</li> </ul>
	Macrolides and other related drugs	Lecture	1	<ul style="list-style-type: none"> <li>• Enlist Macrolides.</li> <li>• Describe anti-microbial spectrum of Macrolides</li> <li>• Describe pharmacokinetics of Macrolides</li> <li>• Describe the mechanism of action of Macrolides</li> <li>• Describe the principal mechanism of resistance to Macrolides</li> <li>• Describe clinical uses of Macrolides</li> <li>• Describe adverse effects of Macrolides.</li> <li>• Describe drug interactions of Macrolides</li> <li>• Differentiate the salient features of Erythromycin, Clarithromycin and Azithromycin in respect of dosing and clinical use.</li> <li>• Relate pharmacokinetics and pharmacodynamics of Macrolides with their clinical applications / uses.</li> </ul>

	Linezolid	Lecture	1	<ul style="list-style-type: none"> <li>• Describe mechanism of action of Linezolid</li> <li>• Describe clinical uses of Linezolid with special emphasis on methicillin-resistant staphylococci and vancomycin-resistant enterococci</li> </ul>
	Clindamycin			<ul style="list-style-type: none"> <li>• Describe mechanism of action of Clindamycin.</li> <li>• Enumerate clinical uses of Clindamycin.</li> <li>• Describe antibiotic-associated (pseudomembranous) colitis.</li> </ul>
	Streptogramins			<ul style="list-style-type: none"> <li>• Enumerate Streptogramins.</li> <li>• Describe clinical use of Quinupristin-Dalfopristin in VRE (Vancomycin-resistant enterococci).</li> </ul>
	Chloramphenicol	Lecture	1	<ul style="list-style-type: none"> <li>• Describe anti-microbial spectrum of Chloramphenicol</li> <li>• Describe mechanism of action of Chloramphenicol</li> <li>• Enlist clinical uses of Chloramphenicol</li> <li>• Describe the reason for obsoleting the systemic use of Chloramphenicol</li> <li>• Enlist adverse effects of Chloramphenicol</li> </ul>

	Quinolones	Lecture	2	<ul style="list-style-type: none"> <li>• Describe Gray baby syndrome.</li> <li>• Classify Quinolones.</li> <li>• Describe the pharmacokinetics of Fluroquinolones with special emphasis on half- life of Moxifloxacin</li> <li>• Enlist respiratory Quinolones.</li> <li>• Describe anti-microbial spectrum of Fluroquinolones.</li> <li>• Describe mechanism of action of Fluroquinolones.</li> <li>• Describe the principal mechanism of resistance to Fluroquinolones,</li> <li>• Describe clinical uses of Fluroquinolones</li> <li>• Describe adverse effects of Fluroquinolones</li> <li>• Describe drug interactions of Fluroquinolones</li> <li>• Relate pharmacokinetics and pharmacodynamics of Fluroquinolones with their clinical applications / use.</li> </ul>
	Sulfonamides And Trimethoprim	Lecture	1	<ul style="list-style-type: none"> <li>• Classify Sulfonamides</li> <li>• Describe anti-microbial spectrum of Sulfonamides</li> <li>• Describe mechanism of action of Sulfonamides and Trimethoprim</li> <li>• Describe mechanism of resistance to Sulfonamides</li> <li>• Describe clinical uses of Sulfonamides and Trimethoprim</li> <li>• Describe adverse effects of Sulfonamides and Trimethoprim</li> <li>• Describe the advantages of combining sulfamethoxazole with trimethoprim (Co- Trimoxazole)</li> <li>• Describe the drug interaction of</li> <li>• Sulphonamides with Phenytoin.</li> </ul>



	Parasites: HydatidCyst	Lecture	2	<ul style="list-style-type: none"> <li>Describe the life cycle and important properties of Echinococcus</li> <li>Relate the pathogenesis to the clinical features and lab work up of Echinococcus</li> <li>Identify cysts of Echinococcus in the lab</li> </ul>
	Leishmania			<ul style="list-style-type: none"> <li>Describe the life cycle, and important properties of Leishmania</li> <li>Relate the pathogenesis to the clinical features and lab work up of Leishmania</li> </ul>
Pathology	Toxoplasma	Lecture	3	<ul style="list-style-type: none"> <li>Describe the life cycle and important properties of Toxoplasma</li> <li>Relate the pathogenesis to the clinical features and lab work up of Toxoplasma</li> </ul>
	Malaria			<ul style="list-style-type: none"> <li>Describe the life cycle and important properties of Malarial parasite</li> <li>Relate the pathogenesis to the clinical features and lab work up of Malaria</li> </ul>
	Tenia			<ul style="list-style-type: none"> <li>Describe the life cycle, important properties, of Tenia saginata and solium</li> <li>Relate pathogenesis to the clinical features and lab work up of Tenia saginata and solium</li> </ul>
Forensic Medicine	Sex determination	Lecture	2	Describe parameters of sex determination
	Race determination			Describe parameters of race determination
	Examination of hair			Describe medico legal aspects of hair
	Forensic odontology			Write the application of odontology in forensic medicine
	Forensic Anthropometry			Describe medico legal aspects of forensic anthropometry

<b>Community Medicine</b>	Epidemiology and control of vector borne diseases <ul style="list-style-type: none"> <li>• Malaria</li> <li>• Dengue and other Viral haemorrhagic fevers and Arboviral infections</li> <li>• Plague</li> <li>• Filariasis</li> </ul>	Lecture	2	<ul style="list-style-type: none"> <li>• Describe the epidemiological determinants, frequency and distribution of Malaria</li> <li>• Compare the prevalence/incidence of malaria in different provinces of Pakistan.</li> <li>• Explain the preventive and control measures of Malaria</li> <li>• Describe the scope/function of Malaria control program.</li> <li>• Explain the types, risk factors, complications and control measures of viral hemorrhagic fevers including Dengue fever</li> </ul>
	Epidemiology & control of Leishmaniasis	Lecture	1	<ul style="list-style-type: none"> <li>• Describe the epidemiological determinants, frequency and distribution of Leishmaniasis</li> <li>• Explain the preventive and control measures of Leishmaniasis</li> </ul>
	Zoonotic & direct contagious diseases and direct contagious diseases <ul style="list-style-type: none"> <li>• Rabies</li> <li>• Anthrax</li> <li>• Plague</li> <li>• Brucellosis</li> <li>• Tetanus</li> <li>• Scabies</li> </ul>	Lecture	2	<ul style="list-style-type: none"> <li>• Explain the pre and post exposure prophylaxis of Rabies</li> <li>• Explain the epidemiology, types of Anthrax and its preventive measures</li> <li>• Discuss the history, types and prevention of Plague</li> <li>• Explain the etiology, risk factors, clinical features and prevention of Brucellosis</li> <li>• Explain the preventive measures of Scabies</li> <li>• Discuss the etiology, risk factors, clinical features and prophylaxis of pre and post exposure of Tetanus</li> </ul>
	<ul style="list-style-type: none"> <li>• Leprosy</li> <li>• Trachoma</li> </ul>			<ul style="list-style-type: none"> <li>• Explain the etiology, risk factors, stages and preventive measures of Leprosy</li> <li>• Explain the etiology, risk factors, complications and preventive measures of Trachoma</li> </ul>

Family medicine	Malaria & Hepatitis control program teams	Lecture	1	<ul style="list-style-type: none"> <li>• Explain the etiology, clinical features, types, investigations and management of Malaria in family practice</li> <li>• Describe the red-flags in a patient with Malaria for referral to specialty care</li> <li>• Identify at risk patients of hepatitis and Malaria and offer them screening</li> </ul>
<b>Theme (Fever and Infection)</b>				
Pharmacology	Antimalarials	Lecture	2	<ul style="list-style-type: none"> <li>• Describe terms like chemoprophylaxis, causal prophylaxis, terminal prophylaxis and radical cure with examples of drugs.</li> <li>• Classify antimalarial drugs.</li> <li>• Enlist drugs used for chemoprophylaxis of malaria.</li> <li>• Enlist drugs used for radical cure of malaria.</li> <li>• Describe the pharmacokinetics of Chloroquine with special emphasis on volume of distribution and dosing</li> <li>• Describe mechanism of action of Chloroquine, Quinine, Mefloquine, Halofantrine, Primaquine, Pyrimethamine and Artemisinin.</li> <li>• Describe adverse effects of antimalarial drugs</li> <li>• Describe Cinchonism and Blackwater fever.</li> <li>• Enlist the antimalarial drugs relatively safe in pregnancy.</li> <li>• Describe the antimalarial drugs contraindicated in G6PD deficiency.</li> <li>• Relate pharmacokinetics and pharmacodynamics of antimalarial drugs with their clinical applications / use.</li> </ul>

	Antifungal drugs	Lecture	2	<ul style="list-style-type: none"> <li>• Classify Antifungal drugs.</li> <li>• Describe the pharmacokinetics of Amphotericin B and Ketoconazole</li> <li>• Describe the advantages of liposomal preparation of Amphotericin B</li> <li>• Describe mechanism of action of Azoles, Amphotericin B, Griseofulvin, Terbinafine, and Nystatin.</li> <li>• Describe clinical uses of Azoles, Amphotericin B, Griseofulvin, Terbinafine, and Nystatin.</li> <li>• Describe adverse effects of Azoles, Amphotericin B, Griseofulvin, Terbinafine, and Nystatin.</li> <li>• Describe drug interactions of Ketoconazole and Amphotericin B</li> </ul>
	Antivirals	Lecture	2	<ul style="list-style-type: none"> <li>• Classify antiviral drugs</li> </ul>
	Anti-herpes			<ul style="list-style-type: none"> <li>• Enlist anti- Herpes drugs</li> <li>• Describe the pharmacokinetics of Acyclovir</li> <li>• Describe mechanism of action of Acyclovir</li> <li>• Describe clinical uses of Acyclovir.</li> <li>• Describe adverse effects of Acyclovir</li> <li>• Describe the role of Ganciclovir in CMV retinitis.</li> </ul>
	Anti-HIV drugs	Lecture	1	<ul style="list-style-type: none"> <li>• Classify anti-HIV drugs.</li> </ul>
				<ul style="list-style-type: none"> <li>• Describe the role of entry inhibitors, integrase inhibitors, protease inhibitors, NRTIs and NNRTIs in HIV treatment</li> <li>• Describe adverse effects of Zidovudine and Indinavir</li> <li>• Describe the rationale of HAART therapy.</li> </ul>
	Viruses: Corona	Lecture	5	Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Corona Virus

<b>Pathology</b>	Viruses: HIV			Describe the structure, important properties, pathogenesis and clinical features along with labwork up of HIV
	Viruses: Herpesviruses			Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Herpesviruses
	Viruses: Tumor Viruses			Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Tumor viruses
	Viruses: MMR			Describe the structure, important properties, pathogenesis and clinical features along with lab work up of MMR viruses
	Fungi: Aspergillus	Lecture	1	Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Aspergillus
	Fungi: Candida			Describe the structure, important properties, pathogenesis and clinical features along with lab work up of Candida
	Tenia			Describe the structure, important properties, pathogenesis and clinical features along with labwork up of Tenia
<b>Forensic Medicine</b>	Medico legal issues related to HIV patient	Lecture	2	Describe legal issues related to HIV patient
	Dactylography			Describe medico legal aspects of dactylography
	DNA finger printing	Lecture		<ul style="list-style-type: none"> <li>Define DNA finger printing</li> <li>Write its application in forensic practice</li> <li>Write methods of collection of samples and dispatch to laboratory</li> </ul>
	Tattoos, scarmarks, Superimposition			<ul style="list-style-type: none"> <li>Describe medico legal aspects of tattoo marks, Describe medico legal aspects of scar tissue,</li> <li>Describe medico legal aspects of superimposition</li> </ul>

	and facial reconstruction	Lecture	1	Describe medico legal aspects of facialreconstruction
	Polygraph			Describe medico legal aspects of polygraph
	Narcoanalysis			Describe medico legal aspects of narcoanalysis
<b>Family Medicine</b>	TORCH infections	Lecture	1	Define TORCH infection
				Describe the steps of investigations for TORCH infections
				Describe the preventive strategies for TORCH infections and their complications
<b>Community Medicine</b>	Epidemiology & control of airborne diseases	Lecture	1	<ul style="list-style-type: none"> <li>Describe the epidemiological determinants, frequency and distribution of measles, mumps, chickenpox, rubella, Diphtheria, Pertissus and meningitis</li> <li>Explain the preventive and control measures of measles, mumps &amp; rubella with reference to Pakistani context.</li> </ul>
	Epidemiology & control of Corona virus infection	Lecture	1	<ul style="list-style-type: none"> <li>Describe the epidemiological determinants, frequency and distributionof corona</li> <li>Compare the prevalence/incidence of corona in different parts of the world.</li> <li>Describe the preventive and controlmeasures of corona Describe the role of Pakistani government in corona control program.</li> </ul>

	<p>Epidemiology and prevention of water borne diseases:</p> <ul style="list-style-type: none"> <li>• Cholera</li> <li>• Typhoid</li> <li>• Acute Diarrhea and Dysentery</li> <li>• Polio</li> <li>• Hepatitis A and E</li> <li>• Food poisoning</li> <li>• Amebiasis and Giardiasis</li> <li>• Brucellosis</li> <li>• Leptospirosis</li> <li>• Worm infestations</li> </ul>	Lecture	2	<ul style="list-style-type: none"> <li>• Enumerate common water borne diseases</li> <li>• Explain the epidemiology and prevention measures of these diseases</li> <li>• describe the current situation of these diseases on Pakistan and worldwide</li> </ul>
Ophthalmology	Acute & chronic dacryocystitis	Lecture	1	<ul style="list-style-type: none"> <li>• Discuss the etiology, clinical features, investigation and management of congenital nasolacrimal duct obstruction</li> <li>• Assess the time of probing in children</li> <li>• Differentiate between acute &amp; chronic dacryocystitis</li> <li>• Discuss the etiology, clinical features, investigation and management of dacryocystitis.</li> </ul>
	Episcleritis	Lecture	1	<ul style="list-style-type: none"> <li>• Discuss the etiology, clinical features, investigations and management of episcleritis</li> </ul>
	Infective conjunctivitis	Lecture	1	<ul style="list-style-type: none"> <li>• Discuss the etiology, clinical features, investigations and management</li> </ul>

				of infective conjunctivitis.
<b>ENT</b>	Acute&chronic pharyngitis	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,symptoms,signs,investigations required and management</li> </ul>
	Acute&chronic Rhinitis	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,symptoms,signs,investigations required and management</li> </ul>
	Acute&chronic sinusitis	Lecture	2	<ul style="list-style-type: none"> <li>Describe etiology,symptoms,signs,investigations required and management</li> </ul>
	Acute&chronic Tonsillitis	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,symptoms,signs,investigations required and management</li> </ul>
<b>MEDICINE</b>	PUO	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,diagnosis and management of PUO.</li> </ul>
<b>PAEDIATRICS</b>	PUO	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,diagnostic evaluation and management of PUO in children.</li> </ul>
	Child with rash	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology of different types of rashes in children</li> </ul>
<b>SURGERY</b>	Surgical infections	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiological organisms,risk factors,prevention and management of surgical infections,</li> </ul>
	Anaesthesia and pain relief	Lecture	1	<ul style="list-style-type: none"> <li>Describe different types of anaesthesia and pain management</li> </ul>
	Acute abdomen	Lecture	1	<ul style="list-style-type: none"> <li>Describe etiology,diagnosis and management of acute abdomen.</li> </ul>
<b>PRIME</b>	Attributes of Professionalism	Lecture	1	<ul style="list-style-type: none"> <li>Descriminate between empathy and sympathy</li> </ul>
	Research process	Lecture	1	<ul style="list-style-type: none"> <li>Explain the steps involved in research process</li> </ul>
	Identify study questions	Lecture	1	<ul style="list-style-type: none"> <li>Brainstorming for identifying research topic</li> <li>Selecting a general topic</li> <li>Narrowing from a broad general topic to a more specific focused area of research.</li> </ul>
	Literature review	Lecture	2	<ul style="list-style-type: none"> <li>Types of literature review.</li> <li>Strategies of literature review.</li> <li>Search engines and their limitations.</li> </ul>



				<ul style="list-style-type: none"> <li>• Difference between the various sources of information.</li> <li>• Selecting information for academic writing.</li> <li>• Academic reading&amp;writing.</li> <li>• Develop an evidence table.</li> <li>• Formulate/refine research question from gaps from evidence table.</li> </ul>
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## 5.2 Practical Work

Week 1 Practicals			
Subject	Topic	Hours	LOs
Pathology	Cell of inflammation	2	Identify Cells of inflammation in the microscope
	Acute Appendicitis		Identify the histopathological changes in acute appendicitis
Forensic Medicine	Gastric Lavage	2	Demonstrate the steps of gastric lavage
Pathology	Chronic cholecystitis	2	-Identify the morphological changes occurring in chronic cholecystitis
	Granuloma	2	- Identify the various cells and their arrangement in a granuloma
	Granulation Tissue	2	-Identify the histological features of granulation tissue
	Catalase test	2	-Perform and interpret the result of catalase test by tube and slide method
	Coagulase test	2	-Perform and interpret the result of coagulase test by tube method

	Oxidase test	4	-Perform and interpret the result of coagulase test
	Culture media		-Identify blood agar, Mannitol salt agar, Chocolate media, Cary Blair transport media in the lab -Identify different types of haemolysis on blood agar
<b>Pharmacology</b>	Acute Tonsillitis	2	Prescription Writing Construct a prescription for a patient with acute tonsillitis.
<b>Forensic Medicine</b>	Sex determination through bones identification of Hair	4	Identify human sex through bones Identify human hair through microscopy Differentiate between hair and fibre
<b>Pharmacology</b>	Malaria	2	Prescription Writing Construct a prescription for a patient with Malaria
<b>Pathology</b>	Hydatid Cyst	2	Identify cysts and ova of Echinococcus in the lab
	Leishmania	2	Identify leishmania in slides of bone marrow/ skin biopsies
	Malaria	2	Identify Malarial parasite trophozoites and gametocytes under microscope
	Taenia saginata/solium	2	Identify ova of Taenia in the lab
<b>Community medicine</b>	Communicable diseases models	2	Identify the models related to the communicable diseases Explain the complication, preventive measures and the identification signs of concerned disease

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

Hours Distribution	
Theory	
Discipline	No. of hours
Pathology	33
Pharmacology	28
Forensic Medicine	11
Community Medicine	14
Eye	03
ENT	05

Pediatrics	02
General Medicine	01
Family Medicine	02
Surgery	03
Gynae & Obs	02
PRIME&Research	05
<b>Total</b>	<b>109</b>
<b>Practical/ SGDs</b>	
Pathology	22
Pharmacology	06
Forensic Medicine	06
Community Medicine	02
<b>Total</b>	<b>36</b>



## 6 Examination and Methods of Assessment:

The year-3 will be assessed in 3 blocks.

- 1) Block-1 (Foundation 2 and Infection and Inflammation modules) will be assessed in **paper-G**.
- 2) Block-2 (Multisystem, blood and MSK modules) will be assessed in **paper-H**.
- 3) Block-3 (CVS and Respiratory module) will be assessed in **paper-I**.
- 4) Each written paper consists of 120 MCQs.
- 5) Internal assessment will be added to final marks in KMU.
- 6) In OSPE, each station will be allotted 6 marks, and a total of 120 (+10% mark of internal assessment) marks are allocated for each OSPE/OSCE examination.
- 7) Practical assessment will be in the form of OSPE/OSCE which will also include embedded viva stations. The details of each section are given in the tables given below.

**Table-1: Total Marks Distribution 3<sup>rd</sup> Year MBBS**

<b>Assessment Plan of 3<sup>rd</sup> Year MBBS</b>						
<b>Theory paper</b>	<b>Modules</b>	<b>Theory marks</b>	<b>Internal assessment theory (10%)</b>	<b>OSPE/OSPE</b>	<b>Internal assessment OSPE/OSPE(10%)</b>	<b>Total Marks</b>
Paper G	Foundation-II	120	14	120	14	268
	Inf.&Inflamm.					
Paper H	Multisystem Blood	120	13	120	14	267
	MSK-II					
Paper I	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-1: 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
Total	49	71	120

**Table-2: 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
Total	12	8	20

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



## 7 Learning Opportunities and Resources

### 7.1 Books:

#### 1)Pharmacology:

- Basic & Clinical Pharmacology, 14<sup>th</sup> edition
- Goodman Gilman's The Pharmacological Basis of Therapeutics, 13<sup>th</sup> edition
- Lippincott Illustrated Reviews Pharmacology, 7<sup>th</sup> edition

#### 2)Pathology:

- i. M Jawtz Medical Microbiology 28<sup>th</sup> edition.
- ii. Robbin's Basic Pathology 10<sup>th</sup> edition

**Website:** <https://www.medicotime.com>

#### 3)Forensic Medicine: 1-Principles and practice of Forensic Medicine by Naseeb R awan

2-Text book of Forensic Medicine and Toxicology by Nagesh Kumar G Rao.

3-Praikhs textbook of medical jurisprudence and toxicology .

### 7.2 Website:

AIDS Medicolegal Aspects-NCBI:<https://ncbi.nlm.nih.gov>

#### 4)Community Medicine:

1. Park K. Park's textbook for preventive and social medicine. 23<sup>rd</sup> ed. Bhanot publishers: Jabalpur;2015

**Link for free download PDF:** [https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-free/#Download\\_Park8217s\\_Textbook\\_of\\_Preventive\\_and\\_Social\\_Medicine\\_PDF\\_free](https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-free/#Download_Park8217s_Textbook_of_Preventive_and_Social_Medicine_PDF_free)

2. Ansari IS. Textbook of Community Medicine. 8<sup>th</sup> ed. Time publisher, medical division

#### 5)EYE :

1)Clinical ophthalmology by M.S,Jatoi

2)Parson disease of eye

3)Clinical ophthalmology by kanski

#### 6)ENT:

1. Logan Turners diseases of the Nose,Throat and Ear 10<sup>th</sup> edition

2.Oxford hand book of ENT and Head and Neck Surgery.

## 8 Timetables

### AYUB MEDICAL COLLEGE ABBOTTABAD

#### TIMETABLE OF 3<sup>RD</sup> YEAR MBBS CLASS FOR THE SESSION 2023

#### Inflammation & Infection Module, Week 01: Theme 01 (Pain & Fatigue)

Date-----

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
Mon	<b>Pharmacology L3</b> Selective COX-2 inhibitors, Dr. Nisar Ahmad	<b>Pathology L4</b> Morphological patterns, defects of inflammation Dr. Ammar	HOSPITAL DUTY		<b>Ophthalmology L2</b> Episcleritis Dr Bushra Aqil	PRAYER BREAK	<b>A: Pharmacodynamic</b> <b>B: Forensic Medicine</b> <b>C: Pathology 1</b> <b>D: Pathology 2</b>	
Tue	<b>Community Med L2</b> Infection control Dr. Adnan Rashid	<b>Pharma. L4</b> Antihistamin Serotonin agonist & antagonist Dr.Afsheen	HOSPITAL DUTY		<b>Pathology L5</b> Chronic granulomatous inflammation Dr. Ammar		<b>A: Pathology 2</b> <b>B:Pharmacodynamics</b> <b>C: Forensic Medicine</b> <b>D: Pathology 1</b>	
Wed	<b>Pathology L6</b> Chronic inflammation, Systemic effects of inflammation Dr. Ammar	<b>Forensic Med L3</b> Medicolegal aspects of trauma Dr. Omair	HOSPITAL DUTY		<b>Pharmacology L5</b> Antihistamines, Serotonin agonist and antagonist Dr. Afsheen		<b>ENT L2</b> Acute & chronic rhinitis Dr Imran Shah	<b>Community Med L3</b> Infection control Dr. Adnan Rashid
Thurs	<b>A: Pathology 1</b> <b>B: Pathology 2</b> <b>C: Pharmacodynamics</b> <b>D: Forensic Medicine</b>		HOSPITAL DUTY		<b>Pathology L7</b> Prostaglandins, Overview to tissue healing and repair <b>Dr. Ammar</b>		<b>Ophthal.L3</b> Infective conjunctivitis Dr. Danish Zafar	<b>Prime L2</b> Steps of research Dr. Zainab Naznin
Fri	PRACTICAL <b>A: Forensic Medicines</b> <b>B: Pathology 1</b> <b>C: Pathology 2</b> <b>D: Pharmacodynamics (Dr. Saad)</b>		<b>Pathology L8</b> Tissue regeneration Cell Cycle <b>Dr. Ammar</b>	<b>Pharmacology L6</b> Introduction to Chemotherapy Dr. Adeel Alam			<b>12:45-1:30</b>	<b>1:30-3:00</b>
						Jumma Prayer	SDL	

Pharmacodynamics: Detection of Aspirin in urine

Pathology 1: Atrophy

Pathology 2: BPH

Forensic medicine: Gastric Lavage (Dr. Sadia Habiba)



**Ayub Medical COLLEGE ABBOTTABAD****TIMETABLE OF 3RD YEAR MBBS CLASS FOR THE SESSION 2023****Inflammation & Infection Module, Week 02: Theme 02 (Trauma & Repair**

DATE.....

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
<b>Mon</b>	<b>Pathology L9</b> Scarring, Growth factors & receptors Dr. Ammar	<b>ForensicMedL4</b> Toxicity by analgesics Dr.Sadia Habiba	<b>HOSPITAL DUTY</b>		<b>Pharma.L7</b> Penicillins Dr. Adeel Alam	<b>PRAYER BREAK</b>	<b>A: Pharmacy</b> <b>B: Forensic Medicine</b> <b>C: Pathology 1</b> <b>D: Pathology 2</b>	
<b>Tue</b>	<b>Pharma.L8</b> Penicillins Dr. Adeel Alam	<b>Pathology L10</b> ECM, Wound healing Dr.Ammar	<b>HOSPITAL DUTY</b>		<b>Comm.Med L4</b> Disease carriers & vector control Dr.Adnan Rashid		<b>A: Pathology 2</b> <b>B: Pharmacy</b> <b>C: Forensic Medicine</b> <b>D: Pathology 1</b>	
<b>Wed</b>	<b>Com.medicin eL5</b> Nosocomial infections & its control Dr Adnan	<b>Pathology L11</b> Pyogenic Bacteria Dr. Jamila Farid	<b>HOSPITAL DUTY</b>		Acute & chronic sinusitis <b>ENT L3</b> Dr Imran Shah		<b>PharmacologyL 9</b> Cephalosporins Dr. Wajid Ali	<b>ForensicMedL 5</b> Fetal age determination Dr. Salma Shazia
<b>Thurs</b>	<b>A: Pathology 1</b> <b>B: Pathology 2</b> <b>C: Pharmacy</b> <b>D: Forensic Medicine</b>		<b>HOSPITAL DUTY</b>		<b>Pharma L10</b> Cephalosporins Dr. Wajid Ali		<b>PRIME L3 (Research)</b> Identify study questions Dr.Zainab Naznin	<b>Pathology L12</b> Pyogenic Bacteria Dr. Jamila Farid
<b>Fri</b>	<b>A: Forensic Medicine</b> <b>B: Pathology 1</b> <b>C: Pathology 2</b> <b>D: Pharmacy</b>		Rickettsia <b>Patho.L1</b> 3Dr.Nasreen Gul	<b>Pharma.L11</b> Betalactamase inhibitors Dr. Maha Aziz	<b>Forensic MedL6</b> Age determination by Skeletal & dental study Dr. Omair Khan		<b>12:45-1:30</b>  <b>Jumma Prayer</b>	<b>1:30-3:00</b>  <b>SDL</b>

Pharmacy: Prescription writing

Pathology 1: Cells of inflammation &amp; acute appendicitis

Pathology 2: Calcification

Forensic medicine: Practice session

**AYUB MEDICAL COLLEGE ABBOTTABAD**  
**TIMETABLE OF 3RD YEAR MBBS CLASS FOR THE SESSION 2023**

**Inflammation & Infection Module, Week 03: Theme 03 (Fever & Infection)**

Date.....

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
<b>Mon</b>	<b>Pathology L14</b> Pyogenic Bacteria Dr. Jamila Farid	<b>Pharma. L12</b> Tetracyclines Dr. Haq Nawaz	<b>HOSPITAL DUTY</b>		<b>ENT L4</b> Acute & chronic sinusitis Dr Imran shah	<b>PRAYER BREAK</b>	<b>A: Pharmacodynamics</b> <b>B: Forensic Medicine</b> <b>C: Pathology 1</b> <b>D: Pathology 2</b>	
<b>Tue</b>	<b>Forens Med L7</b> Sex,race determination &examination of hair Dr Salma shazia	<b>Pathology L15</b> Pyogenic Bacteria Dr. Jamila Farid	<b>HOSPITAL DUTY</b>		<b>Com.Medicine L6</b> Epidemiology, control of vector borne diseases Dr.Zeeshan		<b>A: Pathology 2</b> <b>B:Pharmacodynamic:</b> <b>ForensicMedicine</b> <b>D: Pathology 1</b>	
<b>Wed</b>	<b>Pharmacology L13</b> Aminoglycosides Dr. Saima Bukhari	<b>Com.Medicine L7</b> Epidemiology, control of vector borne diseases Dr.Zeeshan	<b>HOSPITAL DUTY</b>		<b>Pharma. L14</b> Macrolide Dr. Haq Nawaz		<b>Forensic MedL8</b> Forensic odontology,Anthropometry Dr.Omair	<b>Pathology L16</b> Spore forming GPR Dr. Nasreen Gul
<b>Thurs</b>	<b>A: Pathology 1</b> <b>B: Pathology 2</b> <b>C:Pharmacodynamic</b> <b>D: ForensicMedicine</b>		<b>HOSPITAL DUTY</b>		<b>MedicineL1</b> PUO Dr Rashid Ali		<b>Pathology L17</b> Spore forming GPR Dr.Sabahat	<b>Patho. L18</b> Clamydia Dr. Noreen
<b>Fri</b>	<b>PRACTICAL</b>		<b>Patho L19</b> Nonsporeforming GPR Dr. Sadaf	<b>Patho.L20</b> Toxoplasmosis Dr.sadaf	<b>Paediatric L1</b> PUO Dr Saima Bibi		<b>12:45-1:30</b>	<b>1:30-3:00</b>
	<b>A: Forensic Medicine</b> <b>B: Pathology 1</b> <b>C: Pathology 2</b> <b>D: Pharmacodynamics</b>					<b>Jumma Prayer</b>	<b>SDL</b>	

Pharmacodynamics: Prescription of acute Tonsillitis & Malaria

Pathology1y: Granuloma

Pathology2:Chronic cholecystitis

Forensic medicine:Sex determination through bones

## AYUB MEDICAL COLLEGE ABBOTTABAD

## TIMETABLE OF 3RD YEAR MBBS CLASS FOR THE SESSION 2023

## Inflammation &amp; Infection Module, Week 4: Theme 03 (Fever &amp; Infection)

Date.....

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
Mon	Pharma. L15 Linezolid, Clindamycin in Streptogramins Dr. Azfar Kamal	Pathology L21 Zoonotic Infections Dr. Jamila	HOSPITAL DUTY		Pharmac. L16 Chloramphenicol Dr. Maha Aziz	<b>PRAYER BREAK</b>	A: Forensic Medicine B: Pharmacy C: Pathology 1 D: Pathology 2	
Tue	Comm. Medicine L8 Zoonotic & direct contagious Disease Dr Adnan	Pharma. L17 Quinolones Dr. Mahwish	HOSPITAL DUTY		Pathology L22 Zoonotic Infections Dr. Jamila		A: Pathology 2 B: Forensic Medicine C: Pharmacy D: Pathology 1	
Wed	Pharma. L18 Quinolones Dr. Mahwish	Forensic Medicine L9 DNA fingerprinting Dr. Nighat Seema	HOSPITAL DUTY		Comm. Med L9 Zoonotic & direct contagious Diseases Dr Adnan		ENT L5 Acute & chronic Tonsillitis Dr. Imran Shah	Surgery L1 Surgical infections Dr. Behrerom
Thurs	A: Pathology 1 B: Pathology 2 C: Forensic Medicine D: Pharmacy		HOSPITAL DUTY		Pathology L23 Leishmania Dr. Sadaf		Pediatrics L2 Child with rash Dr. Saima	Pharma. L19 Anti-leishmaniasis Dr. Faryal Mustafa
Fri	PRACTICAL A: Pharmacy B: Pathology 1 C: Pathology 2 D: Forensic Medicine		Com. Med L10 Epidem. & control of Leishmania Dr. Zeeshan	Path. L24 Tumor viruses Dr. Nasreen	Pathology L25 Malaria Dr. Sadaf		12:45-1:30  Jumma Prayer	1:30-3:00  SDL

Pharmacy : Note Book Checking

Pathology: Granulation tissue

Pathology 2: Catalase test

Community medicine : Communicable diseases

**AYUB MEDICAL COLLEGE ABBOTTABAD**

**TIMETABLE OF 3RD YEAR MBBS CLASS FOR THE SESSION 2023**

**Inflammation & Infection Module, Week 05: Theme 03 (Fever & Infection)**

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
<b>Mon</b>	<b>Pharmacology L20</b> Antimalarials Dr. Haq Nawaz	<b>FamilyMedicineL1 (comm. Medicine)</b> Malaria&Hepatitis control <b>Dr.Zeeshan</b>	<b>HOSPITAL DUTY</b>		<b>PathologyL26</b> MMR Dr.Noreen	<b>PRAYER BREAK</b>	<b>A: Pharmacodynamics</b> <b>B: Forensic Medicine</b> <b>C: Pathology 1</b> <b>D: Pathology 2</b>	
<b>Tue</b>	<b>Pharma.L21</b> Antimalarials Dr. Haq Nawaz	<b>Pathology L27</b> HIV Dr. Noreen	<b>HOSPITAL DUTY</b>		<b>Comm. MedL11</b> Epidemiology& control of air Borne disease Dr. Adnan		<b>A: Pathology 2</b> <b>B: Pharmacodynamics</b> <b>C: Forensic Medicine</b> <b>D: Pathology 1</b>	
<b>Wed</b>	<b>Com. MedL12</b> Epidemiology & control of Corona, Dr. Adnan Rashid	<b>Pharma.L22</b> Sulfonamides and Trimethoprim Dr. Saima Bukhari	<b>HOSPITAL DUTY</b>		<b>Pharmacology L23</b> Anti-HIV drugs Dr. Saad Mufti		<b>Pathology L28</b> Corona Dr. Sadaf	<b>Forensic Med L10</b> Medicolegal issues (HIV patients) Dr. Omair
<b>Thurs</b>	<b>A: Pathology 1</b> <b>B: Pathology 2</b> <b>C: Pharmacodynamics</b> <b>D: Forensic Medicine</b>		<b>HOSPITAL DUTY</b>		<b>Pharm.L24</b> Antivirals, Anti-herpes Dr. Saad Mufti		<b>Gyna&amp;ObsL1</b> Puerp.Pyrexia Dr.Sadia Habib	<b>Pathology L29</b> Tenia Dr.Sadaf
<b>Fri</b>	<b>PRACTICAL</b> <b>A: Forensic Medicine</b> <b>B: Pathology 1</b> <b>C: Pathology 2</b> <b>D: Pharmacodynamics</b>		<b>Patho. L30</b> Herpes viruses Dr. Nasreen	<b>Pharm.L25</b> Antivirals, Anti-herpes Dr. Saad Mufti	<b>PRIM(Research) L4</b> Literature Review Dr.Zainab		<b>12:45-1:30</b> <b>Jumma Prayer</b>	<b>1:30-3:00</b> <b>SDL</b>

Pharmacodynamics: Practice Session

Pathology1:Oxidase test

Pathology2: Coagulase test

Forensic medicine:Differentiation between Hair & fibre (Dr. Inam ur Rehman)

**AYUB MEDICAL COLLEGE ABBOTTABAD**

**TIMETABLE OF 3RD YEAR MBBS CLASS FOR THE SESSION 2023**

**Inflammation & Infection Module, Week 6: Theme 03 (Fever & Infection)**

Days	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-12:45	12:45-1:15	PRACTICAL	
							1:15-2:00	2:00-3:00
<b>Mon</b>	<b>Pathology L31</b> Fungal infections(aspergillus, candida)  Dr.Sabahat	<b>Com.Med.L13</b> Epidemiology& Prevention of water borne diseases  Dr.Adnan	<b>HOSPITAL DUTY</b>		<b>Pharma.L26</b> Antifungal drugs  Dr.M. Faheem	<b>PRAYER BREAK</b>	<b>A:Forensic Medicine</b> <b>B: Pharmacy</b> <b>C: Pathology 1</b> <b>D: Pathology 2</b>	
<b>Tue</b>	<b>Pharma.L27</b> Antifungal drugs  Dr.M. Faheem	<b>PathologyL32</b> Sepsis& Septic Shock  Dr. Nasreen Gul	<b>HOSPITAL DUTY</b>		<b>Fam.MEDICINE L2 TORCH</b> Infections (Gynae&Obs.)  Dr.Ruqia Sultana		<b>A: Pathology 2</b> <b>B:Forensic Medicine</b> <b>C: Pharmacy</b> <b>D: Pathology 1</b>	
<b>Wed</b>	<b>Pharma. L28</b> Antileprosy drugs  Dr.Faryal Mustafa	<b>Pathology L33</b> Hydatid Cyst  Dr. Sadaf	<b>HOSPITAL DUTY</b>		<b>ENT L5</b> Acute & chronic tonsillitis  Dr. Imran Shah		<b>SurgeryL2</b> Anesthesia & pain relief  Dr.Tariq Abbasi	<b>Com.Med L14</b> Epidemiology& Prevention of water borne diseases  Dr.Adnan
<b>Thurs</b>	<b>A: Pathology 1</b> <b>B: Pathology 2</b> <b>C: Forensic Med.</b> <b>D:Pharmacy</b>		<b>HOSPITAL DUTY</b>		<b>Gyn.&amp;Obs L2</b> Postoperative wound sepsis  Profes.Dr.Zahida		<b>MODULE EXAM</b>	
<b>Fri</b>	<b>PRACTICAL</b>		<b>ForensicMedL11</b> Tattoos,scar marks  Dr.Omair	<b>PRIM(Research) L5</b> Literature Review  Dr.Zainab	<b>Surgery L3</b> Acute abdomen  Dr.Fazle Junaid		<b>12:45-1:30</b>	<b>1:30-3:00</b>
	<b>A: Pharmacy</b> <b>B: Pathology 1</b> <b>C:Pathology 2</b> <b>D: : Forensic Med.</b>						<b>Jumma Prayer</b>	<b>SDL</b>

Pharmacy: Practice Session

Pathology:Leishmania(Dr.Abbas)

Pathology:Malaria(Dr.Noreen)

Forensic medicine: Practice Session

## 9 For inquiry and troubleshooting



## 10 Course Feedback Form

Course Title: \_\_\_\_\_

Semester/Module \_\_\_\_\_

Dates: \_\_\_\_\_

Please fill the short questionnaire to make the course better.

Please respond below with 1, 2, 3, 4 or 5, where 1 and 5 are explained.

### THE DESIGN OF THE MODLUE

- |  |                            |                            |                          |
|--|----------------------------|----------------------------|--------------------------|
| A. Were objectives of the course clear to you?           | Y <input type="checkbox"/> | N <input type="checkbox"/> |                          |
| B. The course contents met with your expectations        |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                     |                            | 5. Strongly agree          |                          |
| C. The lecture sequence was well-planned                 |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                     |                            | 5. Strongly agree          |                          |
| D. The contents were illustrated with                    |                            |                            | <input type="checkbox"/> |
| l. Too few examples                                      |                            | 5. Adequate examples       |                          |
| E. The level of the course was                           |                            |                            | <input type="checkbox"/> |
| l. Too low   |                            | 5. Too high                |                          |
| F. The course contents compared with your expectations   |                            |                            | <input type="checkbox"/> |
| l. Too theoretical                                       |                            | 5. Too empirical           |                          |
| G. The course exposed you to new knowledge and practices |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                     |                            | 5. Strongly agree          |                          |
| H. Will you recommend this course to your colleagues?    |                            |                            | <input type="checkbox"/> |
| l. Not at all  |                            | 5. Very strongly           |                          |

### THE CONDUCT OF THE MODLUE

- |  |                            |                            |                          |
|--|----------------------------|----------------------------|--------------------------|
| A. The lectures were clear and easy to understand          |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                       |                            | 5. Strongly agree          |                          |
| B. The teaching aids were effectively used                 |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                       |                            | 5. Strongly agree          |                          |
| C. The course material handed out was adequate             |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                       |                            | 5. Strongly agree          |                          |
| D. The instructors encouraged interaction and were helpful |                            |                            | <input type="checkbox"/> |
| l. Strongly disagree                                       |                            | 5. Strongly agree          |                          |
| E. Were objectives of the course realized?                 | Y <input type="checkbox"/> | N <input type="checkbox"/> |                          |

F. Please give overall rating of the course

90% - 100% (     )

80% - 90% (     )

70% - 80% (     )

60% - 70% (     )

50% - 60% (     )

below 50% (     )

Please comment on the strengths of the course and the way it was conducted.

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Please comment on the weaknesses of the course and the way it was conducted.

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Please give suggestions for the improvement of the course.

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Optional - Your name and contact address:

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Thank you!!

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