



**SPIRAL II – INTEGRATED CURRICULUM**  
**STUDY GUIDE FOR THE STUDENTS OF**  
**4<sup>th</sup> YEAR MBBS SESSION 2024- 2025**



**BAQAI MEDICAL COLLEGE**  
**BAQAI MEDICAL UNIVERSITY**

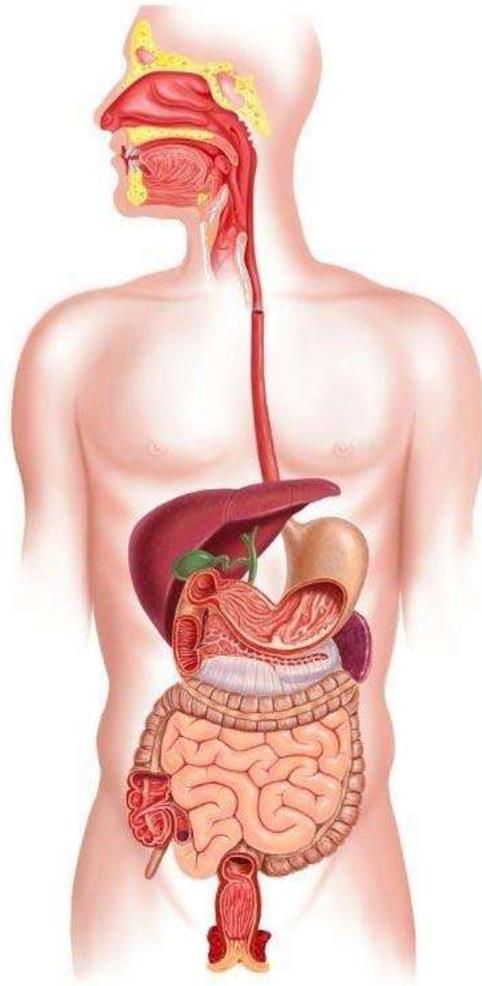
51-Deh Tor, Gadap Road, Superhighway. P.O Box: 2407, Karachi-75340, Pakistan.

(092-21)34410-293 to 298, 34410-427 to 430

Fax: (092-21)34410-317, 34410-431

Email: [info@baqai.edu.pk](mailto:info@baqai.edu.pk), Web: [www.baqai.edu.pk/](http://www.baqai.edu.pk/)

# INTEGRATED MODULAR COURSE STUDY GUIDE



## *GASTROINTESTINAL TRACT & HEPATOBILIARY SYSTEM*

S No	Details	Page No
1.	Preface	5
2.	Vision & Mission of BMU & BMC	6
3.	Policies and Procedures	7
4.	Introduction to the Integrated Curriculum	8
5.	Outcomes of the MBBS Program	9
6.	Introduction to the Teaching Faculty	10
7.	Teaching Methodologies	16
8.	Introduction to Module – I	17
2.	Learning Objectives of Pathology	19
3.	Learning Objectives of Pharmacology & Therapeutics	28
4.	Learning Objectives of Community Medicine	35
7.	Learning Objectives of Medicine	38
8.	Learning Objectives of Surgery	40
10.	Learning Objectives of Obstetrics & Gynecology	41
11.	Learning Objectives of Pediatrics	41
13.	Suggested Reading Books & Websites	42
12.	Assessment Methods	45
13.	Weekly Timetables	46



The landscape of medical education is evolving rapidly, embracing a shift from teacher-centered to student-centered learning approaches across undergraduate and postgraduate levels. In response to these advancements, this study guide for the integrated modular system has been meticulously crafted to align with these changes, following the SPICES model of curriculum development.

1. **Student-centered Approach:** The course organization, content, and activities are predominantly structured around student engagement and empowerment.
2. **Problem-Oriented Learning:** Case-based learning is integrated into our modules to foster problem-solving skills among students.
3. **Explicit Integration:** Basic sciences content is seamlessly integrated with pre-clinical and clinical subjects to provide a comprehensive understanding of medical concepts.
4. **Community Engagement:** Field visits to satellite clinics and community healthcare centers offer students firsthand exposure to community-related health issues.
5. **Elective Opportunities:** Students are encouraged to pursue electives within our institution and other institutes to broaden their learning experiences.
6. **Structured Program:** Our curriculum unfolds systematically, starting from foundational medicine concepts and encompassing all facets of medical sciences in Spiral integration.

Therefore, this study guide serves as a comprehensive resource, offering content-related information, guidance on learning strategies, curriculum management, and outlines of student activities. It is designed to support the undergraduate MBBS program in a multidimensional manner, facilitating holistic learning and development.

<i>Vision</i>	<i>Mission</i>
	
<b><i>Baqai Medical University</i></b>	
<p>To evolve as a nucleus for higher learning with a resolution to be socially accountable, focused on producing accomplished health care professionals for services in all spheres of life at the national and global level”.</p>	<p>The mission of Baqai Medical University is to be recognized as a center of excellence in education, research, patient care, and community services by producing highly capable and knowledgeable professionals.</p>
<b><i>Baqai Medical College</i></b>	
<p>Our vision is to enhance access and excellence in medical education and research, with the aim of capacity building of students and faculty through innovations, and science and technology competencies, to achieve rapid and sustainable health. The medical graduate thus produced, will be informed, and trained enough to serve the community better, and to be an advisor to the national and international health organizations.</p>	<p>The mission of the Baqai Medical College is to produce medical graduates, who are responsible and accomplished individuals and have skills for problem-solving, clinical judgment, research, and leadership for a medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.</p>

## **POLICIES AND PROCEDURES**

### **Code of Conduct and Maintenance of Discipline of Students Regulations Under section 25(e) BMU Act.1996**

All University students shall be under the full disciplinary control of the University. No students shall be allowed to participate in politics. The action against the act of indiscipline shall include fines, debarring from attending class, and cancellation of admission, depending on the gravity of indiscipline.

The following shall constitute acts of indiscipline for which action may be taken against the student or students:

- (a) Breach of any rule public morals, such as:
  - Use of indecent or filthy language;
  - Use of immodest dress;
  - Use of undesirable remarks or gestures; and
  - Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.
- (b) Defiance of authority
- (c) Action, defamatory of and derogatory to Islam
- (d) Immorality
- (e) Being found under the effect of an intoxicant or misuse of drugs including marijuana, LSD dope and other opioids.
- (f) False personation or giving false information or willful suppression of information, cheating or deceiving.
- (g) Inciting or staging a walk-out, a strike, or an unauthorized procession.
- (h) Shouting of slogans derogatory to the prestige of the University or the reputation of its officers or teachers.
- (i) Visiting without a pass place which are not to be visited without a pass.
- (j) Visiting places declared out of bounds for students.

Every student must carry his / her Identity Card which will be open to examination and will be demanded at the time of entrance to the various University Faculties and functions.

No student will be admitted to the facilities of the library, transport, or the canteen unless he /sheis in possession of the Identity Card

# INTRODUCTION TO THE INTEGRATED CURRICULUM (SPIRAL- II) FOR 4<sup>TH</sup> YEAR MBBS

Welcome to the Integrated Curriculum (SPIRAL-II), designed for 4th-year MBBS students. In this study guide, we delve into the principles and structure of our curriculum, emphasizing its unique approach to organ-system-based integration.

The integrated curriculum for 4th-year MBBS is a testament to our commitment to providing comprehensive and cohesive medical education. Rooted in the principle of organ-system-based integration, this curriculum offers a progressive and immersive learning experience.

At its core, the SPIRAL-II curriculum embodies level seven integration, as defined by Harden's 11 levels of integration, encapsulating the pinnacle of correlation. This level of integration underscores our dedication to bridging the traditional boundaries between basic sciences and clinical medicine, fostering a holistic understanding of medical concepts.

Through SPIRAL-II, students embark on a journey of exploration, where the intricacies of various organ systems are intricately woven together to get a comprehensive picture of human health and disease. By transcending the isolated subject matter, students gain a deeper appreciation for the interconnectedness of physiological processes and pathological manifestations.

Key to the success of our integrated approach is the seamless alignment of theoretical knowledge with practical application. By intertwining classroom learning with clinical experiences, SPIRAL-II empowers students to translate theoretical concepts into real-world scenarios, preparing them for the complexities of medical practice.

Furthermore, SPIRAL-II embraces a multidisciplinary approach, fostering collaboration among faculty members from diverse specialties. This collaborative effort ensures that students receive a well-rounded education, enriched by the expertise of professionals across various medical domains.

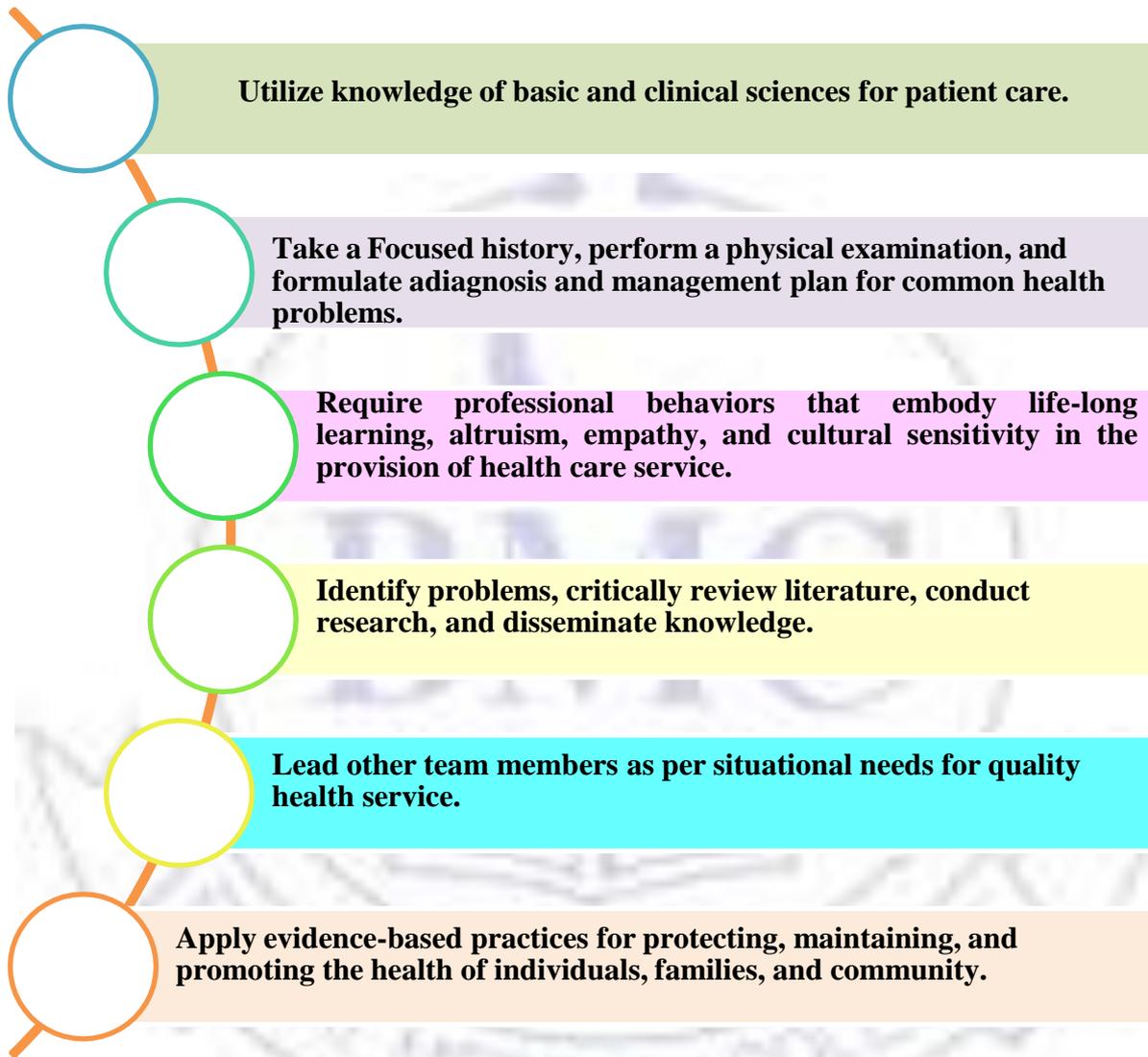
Hence, the Integrated Curriculum (SPIRAL-II) for 4<sup>th</sup> year MBBS embodies a paradigm shift in medical education, where integration, correlation, and multidisciplinary collaboration converge to cultivate competent and compassionate healthcare professionals. Join us as we embark on this transformative journey, where the boundaries of medical knowledge are transcended, and the art and science of medicine are seamlessly intertwined.



**Integration is Key**

## OUTCOMES OF THE MBBS PROGRAM

The Baqai University graduate of the MBBS program will be able to:



# BAQAI MEDICAL COLLEGE

## TEACHING FACULTY FOR 4TH YEAR MBBS



<b>DEPARTMENT OF PATHOLOGY</b>		
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Dr. Rafiq Khanani</b> <a href="mailto:rafiq.khanani@baqai.edu.pk">rafiq.khanani@baqai.edu.pk</a>	MBBS, M. Phil., FC Path (H), Ph.D.	Chairman & Professor
<b>Prof. Dr. Nasima Iqbal</b> <a href="mailto:drnasimaiqbal@baqai.edu.pk">drnasimaiqbal@baqai.edu.pk</a>	MBBS, MPhil, CHPE	Professor
<b>Dr. Muhammad Rizwan</b> <a href="mailto:drmrizwan@baqai.edu.pk">drmrizwan@baqai.edu.pk</a>	MBBS, M Phil, CHPE, CHQP	Associate Professor
<b>Dr. Maeesa Sajeel</b> <a href="mailto:drmaeesasajeel@baqai.edu.pk">drmaeesasajeel@baqai.edu.pk</a>	MBBS, M Phil, M.S, CHPE, CHQP	Associate Professor
<b>Dr. Sarah Azhar</b> <a href="mailto:drsarahazhar@baqai.edu.pk">drsarahazhar@baqai.edu.pk</a>	MBBS, M Phil, CHPE	Assistant Professor
<b>Dr. Ghazal Irfan</b> <a href="mailto:dirfan@baqai.edu.pk">dirfan@baqai.edu.pk</a>	MBBS, DI LH & BT, M Phil, CHPE	Assistant Professor
<b>Dr. Muhammad Khan</b> <a href="mailto:drmuhammadkhan@baqai.edu.pk">drmuhammadkhan@baqai.edu.pk</a>	MBBS, M Phil, MCPS, DCP, DIP, CHPE	Assistant Professor
<b>Dr. Munazza Rashid</b> <a href="mailto:dr.munazzarashid@baqai.edu.pk">dr.munazzarashid@baqai.edu.pk</a>	MBBS, Ph. D	Assistant Professor
<b>Dr. Nadeem Umer Baqai</b> <a href="mailto:nadeemumerbaqai@baqai.edu.pk">nadeemumerbaqai@baqai.edu.pk</a>	MBBS, DIP	Senior Lecturer
<b>Dr. Sana Mubarak</b>	BDS, M. Sc., CHPE	Senior Lecturer
<b>Muhammad Rizwan</b> <a href="mailto:muhammadrizwan@bmu.edu.pk">muhammadrizwan@bmu.edu.pk</a>	M. Sc, M Phil	Senior Lecturer
<b>Dr. Yasir Rishi</b> <a href="mailto:yasirrishi@bmu.edu.pk">yasirrishi@bmu.edu.pk</a>	MBBS, CHPE.	Lecturer
<b>Dr. Tooba Khan</b>	MBBS, CHPE.	Lecturer
<b>Dr. Rozina Khan</b>	MBBS, CHPE.	Lecturer

## DEPARTMENT OF PHARMACOLOGY & THERAPEUTICS

<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Dr. Shaikh Nadeem Ahmed</b> <a href="mailto:dr.nadeem_ahmed@baqai.edu.pk">dr.nadeem_ahmed@baqai.edu.pk</a>	MBBS, M Phil	Chairman & Professor
<b>Prof. Dr. Asif Ahmed</b> <a href="mailto:dr.asifahmed@baqai.edu.pk">dr.asifahmed@baqai.edu.pk</a>	MBBS, Ph. D	HOD & Professor
<b>Dr. Faraz Saleem</b> <a href="mailto:dsaleem@baqai.edu.pk">dsaleem@baqai.edu.pk</a>	BDS, M Phil	Assistant Professor
<b>Dr. Urooj Zafar</b> <a href="mailto:urooj.aamir@baqai.edu.pk">urooj.aamir@baqai.edu.pk</a>	MBBS	Assistant Professor
<b>Dr. Izrum Shafi Rajput</b> <a href="mailto:dr.izrumshafi@baqai.edu.pk">dr.izrumshafi@baqai.edu.pk</a>	BDS, M Phil	Senior Lecturer
<b>Dr. Syeda Javeria Ikram</b> <a href="mailto:dr.javeriaikram@baqai.edu.pk">dr.javeriaikram@baqai.edu.pk</a>	BDS, M Phil	Senior Lecturer
<b>Dr. Hina Masood</b> <a href="mailto:hinamasood@baqai.edu.pk">hinamasood@baqai.edu.pk</a>	MBBS	Senior Lecturer
<b>Dr. Sehrish Mahmood</b> <a href="mailto:sehrishmahmood@baqai.edu.pk">sehrishmahmood@baqai.edu.pk</a>	MBBS	Lecturer
<b>Dr. Humaira Arif</b> <a href="mailto:humairaarif@baqai.edu.pk">humairaarif@baqai.edu.pk</a>	BDS	Lecturer
<b>Dr. Sumreen Mujahid</b> <a href="mailto:sumreenfawaz@baqai.edu.pk">sumreenfawaz@baqai.edu.pk</a>	Pharm D, M Phil	Senior Pharmacist

<b>DEPARTMENT OF COMMUNITY MEDICINE</b>		
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Dr. Nazia Jameel</b> <a href="mailto:drnaziajameel@baqai.edu.pk">drnaziajameel@baqai.edu.pk</a>	MBBS, MPH	HOD & Professor
<b>Prof. Dr. Imtiaz Ahmed Jafry</b> <a href="mailto:drintiazjafry@baqai.edu.pk">drintiazjafry@baqai.edu.pk</a>	MBBS, MPH	Professor
<b>Dr. Syed Muhammad HyderNaqvi</b> <a href="mailto:zulfiqarnaqvi@baqai.edu.pk">zulfiqarnaqvi@baqai.edu.pk</a>	MBBS, M.S.B.E.	Associate Professor
<b>Dr. Syed Nauman Raza</b> <a href="mailto:naumanraza@baqai.edu.pk">naumanraza@baqai.edu.pk</a>	MBBS, MPH	Assistant Professor
<b>Dr. Munir Ahmed Shaikh</b> <a href="mailto:munirshaikh@baqai.edu.pk">munirshaikh@baqai.edu.pk</a>	MBBS, M.S.B.E.	Assistant Professor
<b>Dr. Muneer Ahmed</b> <a href="mailto:muneerahmed@baqai.edu.pk">muneerahmed@baqai.edu.pk</a>	MBBS	Senior Lecturer
<b>Dr. Amara Memon</b> <a href="mailto:dr.amaraaltaf@baqai.edu.pk">dr.amaraaltaf@baqai.edu.pk</a>	MBBS, MPH	Senior Lecturer
<b>Muhammad Jaffar</b> <a href="mailto:muhammadjafferbmu@gmail.com">muhammadjafferbmu@gmail.com</a>		Assistant Director Field Program

<b>DEPARTMENT OF OPHTHALMOLOGY</b>		
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Mir Amjad Ali</b>	MBBS, FCPS	Professor

<b>DEPARTMENT OF ENT</b>		
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Dr. Muhammad Shaheen Malik</b>	MBBS, DLO, FCPS (ENT)	HOD & Professor
<b>Dr. Muhammad Khalid</b>	MBBS, DLO, FCPS (ENT)	Assistant Professor
<b>Dr. Maria Mehmood</b>	MBBS, FCPS (ENT)	Assistant Professor
<b>Dr. Rehana Babar</b>	MBBS, FCPS (ENT)	Assistant Professor
<b>Dr. Muhammad Ahsan Khan</b>	MBBS	Senior Lecturer
<b>DEPARTMENT OF MEDICAL EDUCATION</b>		
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Dr. Shams Nadeem Alam</b>	MBBS, FRCS, MHPE	Director DME, BMU
<b>Dr. Saima Qamar Naqvi</b>	MBBS, FCPS, MHPE	Deputy Director DME, BMC

## DEPARTMENT OF MEDICINE

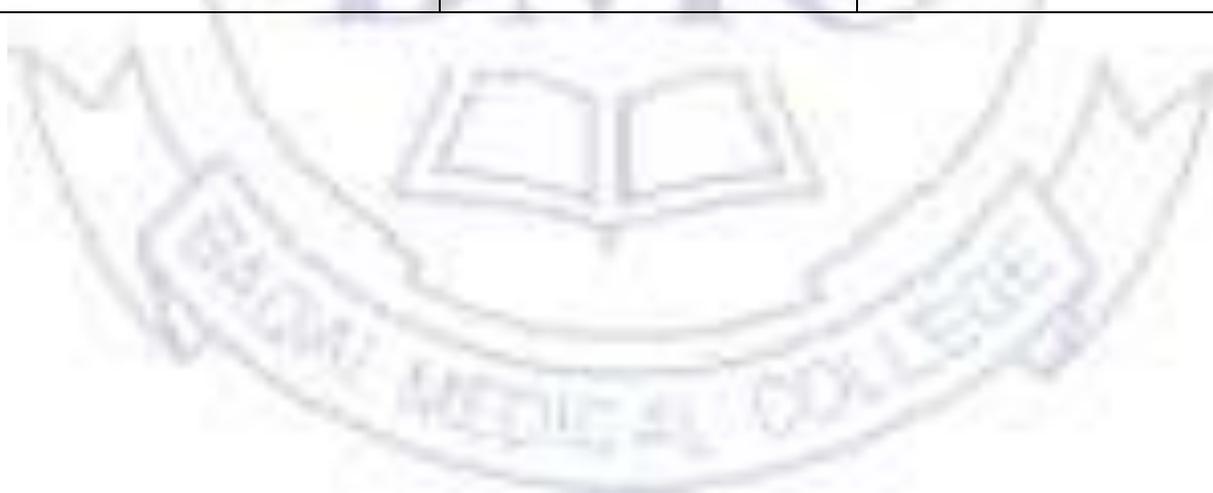
<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof Jameel Ahmed</b> <a href="mailto:jameelahmed@baqai.edu.pk">jameelahmed@baqai.edu.pk</a>		Dean & Chair Medicine
<b>Prof Karim Kammeruddin</b> <a href="mailto:drkarim@baqai.edu.pk">drkarim@baqai.edu.pk</a>		Professor
<b>Dr. Adil Khan</b> <a href="mailto:adilkhan@baqai.edu.pk">adilkhan@baqai.edu.pk</a>		Associate Professor
<b>Dr. Mussarrat Riaz</b> <a href="mailto:mussarratriaz@baqai.edu.pk">mussarratriaz@baqai.edu.pk</a>		Associate Professor
<b>Dr. Masooda Fatima</b> <a href="mailto:masoodafatima@baqai.edu.pk">masoodafatima@baqai.edu.pk</a>		Assistant Professor
<b>Dr. Dania Faisal</b> <a href="mailto:daniafaisal@baqai.edu.pk">daniafaisal@baqai.edu.pk</a>		Assistant Professor
<b>Dr. Saqib Ur Rehman</b> <a href="mailto:saqiburrehman@baqai.edu.pk">saqiburrehman@baqai.edu.pk</a>		Assistant Professor
<b>Dr. Amanullah</b> <a href="mailto:amanullah808040@gmail.com">amanullah808040@gmail.com</a>		Assistant Professor
<b>Dr. Saima Askari</b> <a href="mailto:saimaaskari@baqai.edu.pk">saimaaskari@baqai.edu.pk</a>		Assistant Professor Endocrinology
<b>Dr. Anita Haroon</b> <a href="mailto:dr.anitaharoon@gmail.com">dr.anitaharoon@gmail.com</a>		Assistant Professor Nephrology
<b>Dr. Sumayyah Liaquat</b> <a href="mailto:sumayyahliaquat@yahoo.com">sumayyahliaquat@yahoo.com</a>		Assistant Professor Neurology
<b>Dr. Adeel Ahmed</b> <a href="mailto:adeelahmed@baqai.edu.pk">adeelahmed@baqai.edu.pk</a>		Senior Registrar Gastroenterology

## DEPARTMENT OF SURGERY

<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof. Dr Khalid Ahmed</b> <a href="mailto:drkhalidahmed@baqai.edu.pk">drkhalidahmed@baqai.edu.pk</a>	MBBS, FCPS	Chairman & Professor
<b>Prof. Dr. Ghulam Mustafa Kaimkhani</b> <a href="mailto:ghulammustafa@baqai.edu.pk">ghulammustafa@baqai.edu.pk</a>	MBBS, FCPS	Professor, Orthopedic Surgery
<b>Dr. Muhammad Abid Owais</b> <a href="mailto:drabidowais@baqai.edu.pk">drabidowais@baqai.edu.pk</a>	MBBS, FCPS	Associate Professor
<b>Dr. M. Danish Muneeb</b> <a href="mailto:drdanishmuneeb@baqai.edu.pk">drdanishmuneeb@baqai.edu.pk</a>	MBBS, FCPS	Associate Professor
<b>Dr. Sidra Abbass</b> <a href="mailto:drsidraabbass@baqai.edu.pk">drsidraabbass@baqai.edu.pk</a>	MBBS, FCPS	Associate Professor
<b>Dr. Zubia Masood</b> <a href="mailto:zubiamasood@baqai.edu.pk">zubiamasood@baqai.edu.pk</a>	MBBS, FCPS, MHPE	Associate Professor
<b>Dr. Bashir Ahmed</b> <a href="mailto:drbashirahmed@baqai.edu.pk">drbashirahmed@baqai.edu.pk</a>	MBBS, FCPS	Associate Professor, Pediatric Surgery
<b>Dr. Shafatullah</b> <a href="mailto:drshafatullah@baqai.edu.pk">drshafatullah@baqai.edu.pk</a>	MBBS, MS	Associate Professor, Plastic Surgery
<b>Dr. Abdul Ghaffar</b> <a href="mailto:drabdulghaffar@baqai.edu.pk">drabdulghaffar@baqai.edu.pk</a>	MBBS, MCPS, FCPS	Assistant Professor
<b>Dr. Muhammad Naveed</b> <a href="mailto:nahumhs@hotmail.com">nahumhs@hotmail.com</a>	MBBS, FCPS	Assistant Professor, Orthopedic Surgery
<b>Dr. Tanveer Ahmed</b> <a href="mailto:tanveerjunejo@gmail.com">tanveerjunejo@gmail.com</a>	MBBS, FCPS	Assistant Professor, Urology
<b>Dr. S. M. Abdullah Bukhari</b> <a href="mailto:smab.1986@gmail.com">smab.1986@gmail.com</a>	MBBS, FCPS	Senior Registrar
<b>Dr. Asad Hanif Shaikh</b> <a href="mailto:drasadhanif@gmail.com">drasadhanif@gmail.com</a>	MBBS, FCPS	Senior Registrar, Orthopedic Surgery

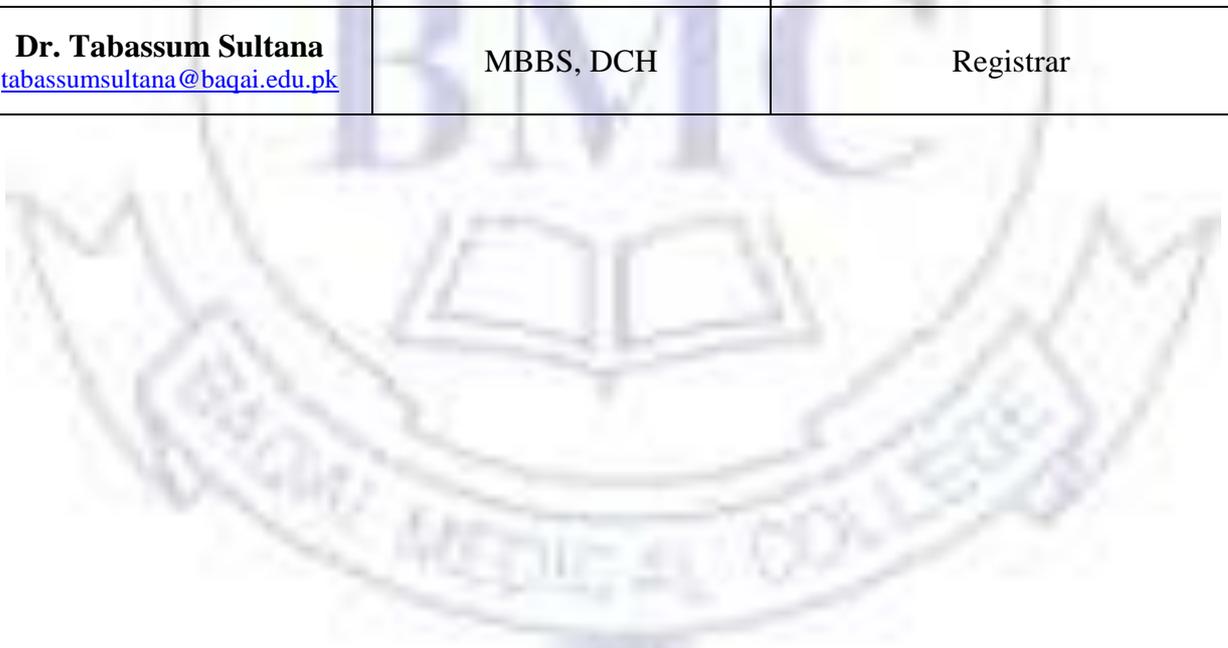
## DEPARTMENT OF GYNECOLOGY & OBSTETRICS

<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Prof Dr. Farrukh Naheed</b> <a href="mailto:drfarrukhnaheed@baqai.edu.pk">drfarrukhnaheed@baqai.edu.pk</a>	MBBS, MCPS, FCPS	HOD & Professor
<b>Dr. Musharraf Jahan</b> <a href="mailto:drmusharafjahan@baqai.edu.pk">drmusharafjahan@baqai.edu.pk</a>	MBBS, MCPS, FCPS	Associate Professor
<b>Dr. Nikhat Ahsan</b> <a href="mailto:nikhatahsan@baqai.edu.pk">nikhatahsan@baqai.edu.pk</a>	MBBS, MCPS, FCPS	Associate Professor
<b>Dr. Saadia Akram</b> <a href="mailto:saadiaakram@baqai.edu.pk">saadiaakram@baqai.edu.pk</a>	MBBS, FCPS	Assistant Professor
<b>Dr. Nazish Ali</b> <a href="mailto:drnazishgeo@gmail.com">drnazishgeo@gmail.com</a>	MBBS, FCPS	Assistant Professor
<b>Dr. Farah Liaquat</b> <a href="mailto:syedafarah2009@hotmail.com">syedafarah2009@hotmail.com</a>	MBBS, FCPS	Assistant Professor
<b>Dr. Naila Qamar</b> <a href="mailto:naila54@hotmail.com">naila54@hotmail.com</a>	MBBS, FCPS	Assistant Professor



## DEPARTMENT OF PEDIATRICS

<i>Name</i>	<i>Qualifications</i>	<i>Designation</i>
<b>Dr. Arshad Hamid Khan</b> <a href="mailto:drarshadhamid@baqai.edu.pk">drarshadhamid@baqai.edu.pk</a>	MBBS, MCPS. DCH, MD	HOD & Associate Professor
<b>Dr Tahira Saeed</b> <a href="mailto:tahirasaeed@baqai.edu.pk">tahirasaeed@baqai.edu.pk</a>	MBBS, FCPS	Assistant Professor
<b>Dr Saba Sohrab</b> <a href="mailto:dr.sabasohrab@baqai.edu.pk">dr.sabasohrab@baqai.edu.pk</a>	MBBS, FCPS, MRCPCH	Assistant Professor
<b>Dr Areeba Tanveer</b> <a href="mailto:dr.areebatanveer@baqai.edu.pk">dr.areebatanveer@baqai.edu.pk</a>	MBBS, FCPS	Assistant Professor
<b>Dr Madiha Abid</b> <a href="mailto:madhiaabid@baqai.edu.pk">madhiaabid@baqai.edu.pk</a>	MBBS, FCPS	Senior Registrar
<b>Dr. Tabassum Sultana</b> <a href="mailto:tabassumsultana@baqai.edu.pk">tabassumsultana@baqai.edu.pk</a>	MBBS, DCH	Registrar



# TEACHING METHODOLOGIES

		
<p><b>Interactive Lectures</b></p>	<p><b>Case-based Learning</b></p>	<p><b>Student's Presentations</b></p>
 <p>VectorStock.com/15068552</p>		
<p><b>Flipped Classroom</b></p>	<p><b>Small group discussions</b></p>	<p><b>Practical demonstration</b></p>
		
<p><b>Hands-on practice of clinical skills in a simulated environment</b></p>	<p><b>Virtual teaching sessions</b></p>	<p><b>Self-directed learning</b></p>

*Gastrointestinal  
Tract  
&  
Hepatobiliary  
System*

# INTRODUCTION TO MODULE – I



*Module – I*

*GIT & Hepatobiliary System*

Systems	<ul style="list-style-type: none"> <li>• GIT System</li> <li>• Hepatobiliary System</li> </ul>
Duration	7 Weeks (From 18 <sup>th</sup> March 2024 to 6 <sup>th</sup> May 2024)
Assessment Dates	7 <sup>th</sup> May 2024
Assessment Pattern	MCQs, SEQs & OSPE

- The Assessment dates are tentative (May change as per the directives of the competent authority of BMC)

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Inflammatory &amp; ulcerative lesions of the oral cavity</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Comprehend Aphthous Ulcer. with its causes, pathogenesis, and morphology.</li> <li>2. Discuss the predisposing factors, pathogenesis, and morphology of Erythroplakia and Leukoplakia.</li> <li>3. List the important viruses and fungi that can cause infections in the oral cavity.</li> </ol>
<b>Disorders of Salivary glands</b>	<b>Interactive Lecture # 3</b>	1 hour	<ol style="list-style-type: none"> <li>1. List the diseases of salivary glands with their causes and brief morphology.</li> <li>2. Classify the tumors of salivary glands.</li> <li>3. Describe the causes, pathogenesis &amp; morphological features of pleomorphic adenoma</li> </ol>

<b>Tumors of the Oral Cavity</b>	<b>Interactive Lecture # 2</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify tumors of the oral cavity.</li> <li>2. List the causes and risk factors of Squamous cell carcinoma.</li> <li>3. Comprehend Squamous cell carcinoma's pathogenesis, morphology &amp; clinical features.</li> </ol>
<b>Congenital disorders of the Esophagus</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe the common congenital anomalies of the Esophagus with their causes and pathological features.</li> <li>2. Define Hiatal Hernia and list its causes and pathological features.</li> </ol>
<b>Inflammatory disorders of the Esophagus</b>	<b>Interactive Lecture # 5</b>	1 hour	<ol style="list-style-type: none"> <li>1. List the inflammatory disorders of the Esophagus.</li> <li>2. Discuss their causes, pathogenesis, and common complications.</li> <li>3. Describe the pathogenesis, Clinical &amp; morphological features of GERD (Gastroesophageal reflux Disease).</li> </ol>

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

<b>Topic</b>	<b>Teaching Strategy</b>	<b>Duration</b>	<b>Learning Objectives</b>
<b>Tumor of Esophagus</b>	<b>Interactive Lecture # 6</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify the tumors of the esophagus.</li> <li>2. Enumerate the causes of esophageal tumors.</li> <li>3. Describe the pathogenesis and morphology of adenocarcinoma and squamous cell carcinoma of the esophagus.</li> <li>4. Discuss the epidemiology &amp; prognosis of esophageal carcinoma.</li> </ol>
<b>Acute Gastritis</b>	<b>Interactive Lecture # 7</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss the predisposing factors, pathogenesis, and complications of acute gastritis.</li> <li>2. Comprehend the clinical features and morphology of acute gastritis.</li> </ol>

<b>Chronic Gastritis</b>	<b>Interactive Lecture # 8</b>	1 hour	1. Describe the causes, predisposing factors, pathogenesis, clinical features, morphology, and complications of chronic gastritis.
<b>Peptic Ulcer Disease</b>	<b>Interactive Lecture # 9</b>	1 hour	1. Discuss the causes and risk factors associated with peptic ulcers. 2. Describe the pathogenesis, morphology, and clinical features of peptic ulcer disease. 3. Differentiate between benign & malignant ulcers of the stomach.
<b>Tumors of Stomach</b>	<b>Interactive Lecture # 10</b>	2 hours	1. Classify tumors of the stomach. 2. Enumerate the common causes and risk factors of Gastric tumors. 3. Describe the pathogenesis and morphology of Carcinoma of the Stomach. 4. Briefly describe lymphoma, stromal tumors of the stomach, and carcinoid tumors.

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

<b>Topic</b>	<b>Teaching Strategy</b>	<b>Duration</b>	<b>Learning Objectives</b>
<b>Congenital anomalies of intestines</b>	<b>Interactive Lecture # 11</b>	1 hour	1. Enumerate the different congenital anomalies of the Intestines with their causes and pathological features. 2. Discuss diverticulitis with its causes, pathogenesis, morphology, diagnosis & clinical features. 3. Describe the causes, pathogenesis, morphology, clinical features, and diagnosis of Congenital Aganglionic Megacolon (Hirschsprung's disease).

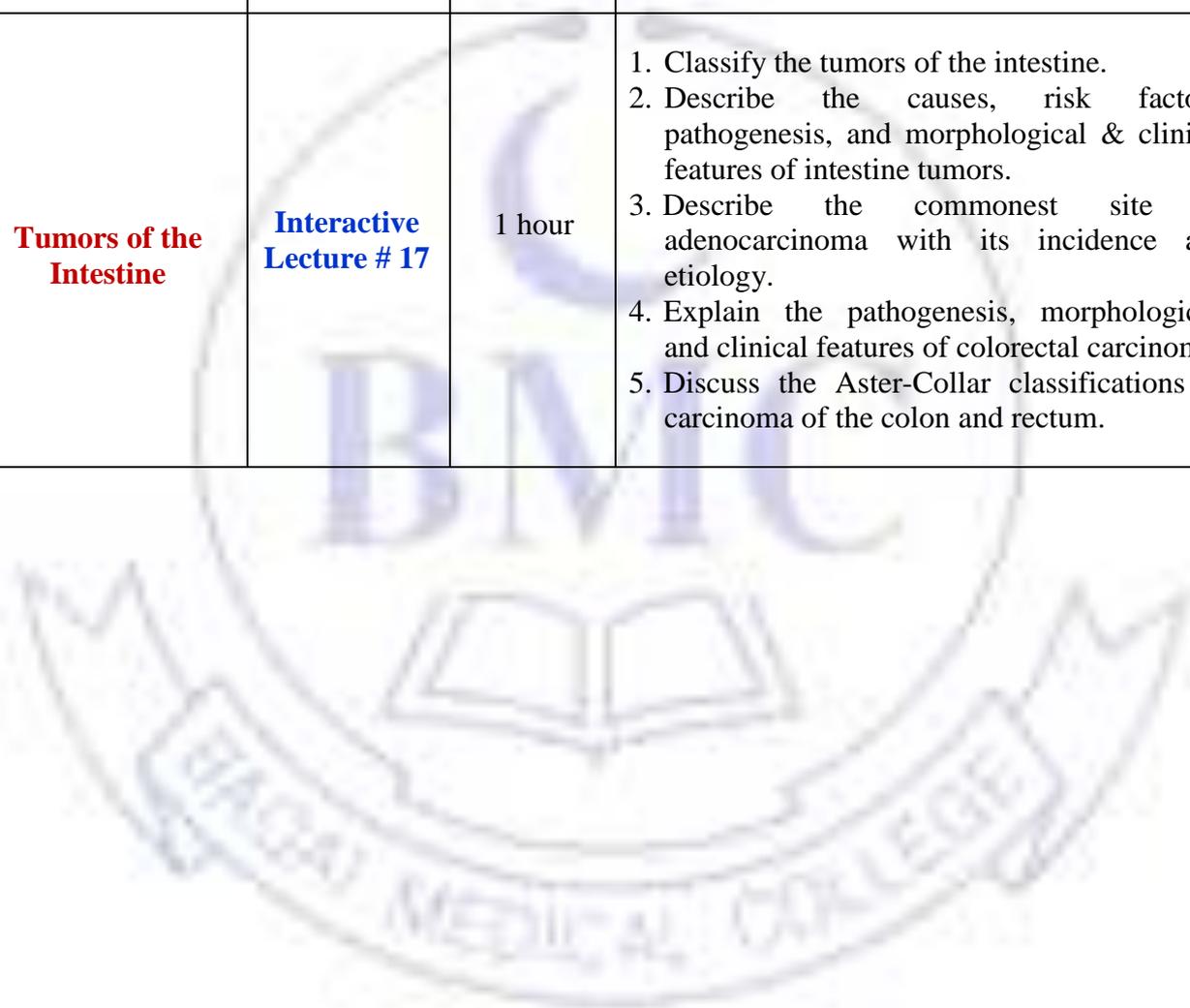
<b>Inflammatory Bowel Diseases - I</b>	<b>Interactive Lecture # 12</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify inflammatory bowel diseases.</li> <li>2. Discuss the causes, pathogenesis, morphology, diagnosis, and clinical features of idiopathic inflammatory bowel diseases.</li> <li>3. Comprehend Ulcerative colitis based on its causes &amp; predisposing factors, pathogenesis, clinical, morphological features, and complications.</li> </ol>
<b>Inflammatory Bowel Diseases - II</b>	<b>Interactive Lecture # 13</b>	1 hour	<ol style="list-style-type: none"> <li>1 List the causes of Crohn's disease.</li> <li>2 Explain its pathogenesis.</li> <li>3 Describe the morphology and clinical features of Crohn's disease.</li> <li>4 Differentiate between the pathological features of Crohn's disease and Ulcerative Colitis.</li> </ol>
<b>Vascular diseases of the intestine</b>	<b>Interactive Lecture # 14</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify the vascular diseases of the intestine.</li> <li>2. Comprehend the causes, pathogenesis, morphology, and clinical features of gangrene and other vascular diseases of the bowel.</li> </ol>

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

<b>Topic</b>	<b>Teaching Strategy</b>	<b>Duration</b>	<b>Learning Objectives</b>
<b>Malabsorption Syndrome</b>	<b>Interactive Lecture # 15</b>	2 hours	<ol style="list-style-type: none"> <li>1. Enumerate the different malabsorption syndromes of intestines.</li> <li>2. Discuss the causes, pathogenesis, morphology, diagnosis, and clinical features of celiac sprue, tropical sprue &amp; Whipple's disease.</li> </ol>
<b>Polyps of the Intestine</b>	<b>Interactive Lecture # 16</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify intestinal polyps.</li> <li>2. Describe the causes and risk factors of non-neoplastic polyps of the intestine.</li> <li>3. Relate the pathogenesis with the clinical</li> </ol>

			<p>features of non-neoplastic polyps of the intestine.</p> <p>4. Describe the morphological &amp; clinical features, and diagnosis of non-neoplastic intestinal polyps.</p> <p>5. Differentiate between the pathological features of Intestinal Papilloma and Polyp.</p>
<p><b>Tumors of the Intestine</b></p>	<p><b>Interactive Lecture # 17</b></p>	<p>1 hour</p>	<ol style="list-style-type: none"> <li>1. Classify the tumors of the intestine.</li> <li>2. Describe the causes, risk factors, pathogenesis, and morphological &amp; clinical features of intestine tumors.</li> <li>3. Describe the commonest site of adenocarcinoma with its incidence and etiology.</li> <li>4. Explain the pathogenesis, morphological, and clinical features of colorectal carcinoma.</li> <li>5. Discuss the Aster-Collar classifications of carcinoma of the colon and rectum.</li> </ol>



## Pathology

At the end of these 1 ½ hour small group discussion sessions, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Disorders of the Oral Cavity</b>	<b>Small group discussion # 1</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Classify the disorders of the Oral Cavity.</li> <li>2. Define dental caries, periodontitis, gingivitis &amp; oral sub-mucosal fibrosis.</li> <li>3. Describe the etiology, pathogenesis, morphology, clinical features, and diagnosis of common disorders of the oral cavity</li> </ol>
<b>Acid peptic disease</b>	<b>Small group discussion # 2</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Comprehend acid peptic disease based on its pathogenesis, morphology, and clinical features.</li> <li>2. Discuss the different complications of acid peptic disease</li> </ol>
<b>Gastroenteritis</b>	<b>Small group discussion # 3</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. List the different causes of gastroenteritis.</li> <li>2. Describe the route of transmission and epidemiology of Enteric tract viruses, bacteria, and protozoa.</li> <li>3. Correlate the pathogenesis of gastroenteritis with its morphological &amp; clinical features.</li> <li>4. Discuss the required lab investigations for its diagnosis.</li> </ol>
<b>Diarrheal diseases</b>	<b>Small group discussion # 4</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Classify the different causes of diarrheal diseases.</li> <li>2. Describe the pathogenesis, morphological &amp; clinical features, and diagnosis of infective enterocolitis.</li> <li>3. Discuss the pathophysiology with the clinical features and lab investigation for diarrheal diseases.</li> </ol>
<b>Intestinal Diseases</b>	<b>Small group discussion # 5</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>5. List the different causes of Intestinal diseases.</li> <li>6. Comprehend the pathogenesis, morphological &amp; clinical features of intestinal diseases.</li> </ol>

## Pathology

At the end of these 1 ½ hour practical sessions, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Barrett's Esophagus &amp; Esophageal Varices</b>	<b>Practical # 1</b>  (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Comprehend Barrett's esophagitis based on its causes, morphology, and clinical features of Barrett's Esophagus.</li> <li>2. Summarize the pathogenesis, morphology, clinical features, and complications of Esophageal Varices.</li> <li>3. Identify the photomicrographs of Barrett's Esophagus and Esophageal Varices with their points of identification.</li> </ol>
<b>Rectal Polyps of the Intestine, Colorectal Carcinoma and Acute Appendicitis</b>	<b>Practical # 2</b>  (Task-based learning)	2 ½ hour	<ol style="list-style-type: none"> <li>1. Summarize the pathogenesis, morphological &amp; clinical features of Intestinal Polyps, Colorectal Carcinoma and Acute Appendicitis.</li> <li>2. Identify the gross specimen and histopathological slide of the juvenile rectal polyp, Colorectal Carcinoma, and Acute Appendicitis with its points of identification.</li> </ol>

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Hepatitis - I</b>	<b>Interactive Lecture # 18</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define acute, chronic, persistent, fulminant hepatitis and carrier state.</li> <li>2. Differentiate between acute and chronic hepatitis.</li> <li>3. Briefly describe the causes, pathogenesis, morphology clinical features, and investigations of hepatitis.</li> </ol>
<b>Hepatitis - II</b>	<b>Interactive Lecture # 19</b>	1 hour	<ol style="list-style-type: none"> <li>1. Comprehend viral hepatitis A, B, C, D, and E for the route of transmission, incubation period, clinical features, and potential outcome of acute infection.</li> <li>2. Enumerate the causes of neonatal hepatitis.</li> </ol>
<b>Liver Cirrhosis &amp; its Complications</b>	<b>Interactive Lecture # 20</b>	1 hour	<ol style="list-style-type: none"> <li>1. Enumerate the common causes of cirrhosis.</li> <li>2. Classify Liver Cirrhosis.</li> <li>3. Discuss the pathogenesis, clinical features, morphology, and complications of Liver cirrhosis.</li> </ol>
<b>Hepatic failure, Massive Liver Necrosis &amp; Hepatocellular Carcinoma</b>	<b>Interactive Lecture # 21</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss the causes, risk factors, pathogenesis, morphological and clinical features of hepatocellular carcinoma.</li> <li>2. Comprehend Liver necrosis based on its pathophysiology, morphology, and clinical features.</li> <li>3. Discuss the causes pathogenesis, morphology, and clinical features of Hepatic failure.</li> </ol>

## Pathology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Alcoholic &amp; non-alcoholic liver disease and Liver Abscess</b>	<b>Interactive Lecture # 22</b>	2 hours	<ol style="list-style-type: none"> <li>1. Explain the pathogenesis of alcohol liver disease and non-alcoholic fatty liver disease.</li> <li>2. Describe the morphological and clinical features of alcoholic hepatitis and non-alcoholic fatty liver disease.</li> <li>3. Enumerate the common causes of liver abscess.</li> <li>4. Describe the pathogenesis &amp; morphology of liver abscesses.</li> </ol>
<b>Cholelithiasis &amp; its complications</b>	<b>Interactive Lecture # 23</b>	1 hour	<ol style="list-style-type: none"> <li>1. Explain the risk factors and pathogenesis of Cholelithiasis.</li> <li>2. Describe the different types of gall stones and their gross appearances.</li> <li>3. Differentiate between acute and chronic cholecystitis based on their pathogenesis, morphological, and clinical features.</li> <li>4. Discuss the complications of Cholelithiasis.</li> </ol>
<b>Pancreatitis &amp; Pancreatic Carcinoma</b>	<b>Interactive Lecture # 24</b>	1 hour	<ol style="list-style-type: none"> <li>1. Differentiate between Acute and Chronic Pancreatitis based on their causes, pathogenesis, morphological and clinical features, and diagnosis.</li> <li>2. Discuss the complications of Pancreatitis.</li> <li>3. Comprehend Pancreatic carcinoma based on its causes, risk factors, pathogenesis, morphological and clinical features.</li> </ol>
<b>Biliary Diseases</b>	<b>Interactive Lecture # 25</b>	1 hour	<ol style="list-style-type: none"> <li>1. Classify Primary and Secondary Biliary diseases.</li> <li>2. Differentiate between intrahepatic and extra-hepatic biliary obstruction.</li> <li>3. Comprehend the causes, risk factors, pathogenesis, morphological and clinical features of Biliary Cirrhosis.</li> <li>4. Discuss the pathogenesis, morphology, clinical features, and Cholangiocarcinoma.</li> </ol>

## Pathology

At the end of these 1 ½ hour practical sessions, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Hepatitis &amp; Liver Cirrhosis</b>	<b>Practical # 3</b>  (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Compare the morphological features of acute hepatitis with chronic hepatitis.</li> <li>2. Identify the histopathological slide of hepatitis and describe its point of identification.</li> <li>3. Correlate the pathogenesis of liver cirrhosis with its morphological features.</li> <li>4. Identify the histopathological slide of cirrhosis and describe its point of identification</li> </ol>
<b>Chronic Cholecystitis &amp; Pancreatitis</b>	<b>Practical # 4</b>  (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Differentiate between the morphology of acute and chronic cholecystitis.</li> <li>2. Examine the gross specimen of chronic cholecystitis and describe its points of identification.</li> <li>3. Identify the histopathological slide of chronic cholecystitis and draw a labeled diagram.</li> <li>4. Summarize the morphological features of Pancreatitis.</li> <li>5. Identify the histopathological slide of pancreatitis and describe its point of identification</li> </ol>

## Pharmacology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Drugs stimulating motility. &amp; Anti-emetic drugs</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of Emesis.</li> <li>2. Classify anti-emetics and drugs increasing motility.</li> <li>3. Explain the mechanism of action of Metoclopramide, Domperidone, Dimenhydrinate, Promethazine, and ondansetron.</li> <li>4. List the pharmacokinetic properties of given drugs.</li> <li>5. Correlate the indications /contra-indications of these drugs.</li> <li>6. List the common adverse effects of these drugs.</li> </ol>
<b>Drugs used in acid peptic disease - 1</b>	<b>Interactive Lecture # 2</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of Acid-peptic disease.</li> <li>2. Classify the drugs to treat acid-peptic disease.</li> <li>3. Explain the MOA of Antacids (Aluminum Hydroxide), and Mucosal Protective Agents (Sucralfate, Misoprostol, and Bismuth subsalicylate).</li> <li>4. List the pharmacokinetics of these drugs.</li> <li>5. Correlate the indication/contra-indication of these drugs.</li> <li>6. Enumerate common adverse effects of these drugs.</li> </ol>

## Pharmacology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Drugs used in acid peptic disease - 2</b>	<b>Interactive Lecture # 3</b>	1 hour	<ol style="list-style-type: none"> <li>1. Recall the classification of drugs used to treat acid-peptic disease.</li> <li>2. Explain the mode of action of PPI (Omeprazole), H<sub>2</sub> receptor blockers (Cimetidine)</li> <li>3. List the pharmacokinetics of these drugs.</li> <li>4. Correlate the indication/contra-indication of these drugs.</li> <li>5. List common adverse effects of these drugs.</li> <li>6. List the Drug-Drug interactions of Omeprazole and Cimetidine.</li> </ol>
<b>Drugs used to treat inflammatory bowel disease.</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of Inflammatory bowel disease (IBD).</li> <li>2. Classify the drugs used to treat IBD.</li> <li>3. Explain the mode of action of Mesalamine and sulfasalazine.</li> <li>4. List the pharmacokinetics of these drugs.</li> <li>5. List the common adverse effects of these drugs.</li> <li>6. List the contraindications of these drugs.</li> <li>7. List the common drug interactions associated with the use of Mesalamine and sulfasalazine.</li> <li>8. Describe the pharmacological role of Glucocorticoids and Immunomodulators in the treatment of IBD.</li> </ol>
<b>Drugs used to treat irritable bowel syndrome.</b>	<b>Interactive Lecture # 5</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline pathophysiology of irritable bowel syndrome (IBS).</li> <li>2. Classify the drugs used to treat IBS.</li> <li>3. Explain the mode of action of Alosetron &amp; Lubiprostone.</li> <li>4. List the pharmacokinetics of these drugs.</li> <li>5. List the common adverse effects of these drugs.</li> <li>6. List the contraindications of these drugs.</li> <li>7. Describe the pharmacological role of Anticholinergic and anti-diarrheal in the treatment of IBS.</li> </ol>

## Pharmacology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Anti-diarrheal agents</b>	<b>Interactive Lecture # 6</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of “Diarrhea”.</li> <li>2. Classify anti-diarrheal drugs with examples.</li> <li>3. Explain the mechanism of action of Loperamide and Diphenoxylate,</li> <li>4. List the pharmacokinetics of these drugs.</li> <li>5. List their clinical uses, common adverse effects, and contraindications.</li> <li>6. Discuss the role of anti-microbial drugs used in the treatment of infectious diarrhea.</li> </ol>
<b>Laxatives</b>	<b>Interactive Lecture # 7</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of “Constipation”.</li> <li>2. Classify Laxatives.</li> <li>3. Explain the Mechanism of Action of senna, lactulose, and Psyllium.</li> <li>4. List the pharmacokinetics of senna, lactulose, and Psyllium.</li> <li>5. List the common adverse effects and contraindications of senna, lactulose, and Psyllium.</li> </ol>
<b>Pancreatic enzyme supplements</b>	<b>Interactive Lecture # 8</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss the role of the exocrine pancreas in digestion.</li> <li>2. List the signs and symptoms of exocrine pancreatic insufficiency.</li> <li>3. Discuss the role of Pancreatin &amp; Pancrelipase supplements in Pancreatic enzyme replacement therapy.</li> <li>4. List the pharmacokinetics of these supplements.</li> <li>5. List the common adverse effects of these supplements.</li> </ol>

## Pharmacology

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Bile acid agents (for gallstones &amp; primary biliary cirrhosis)</b>	<b>Interactive Lecture # 9</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss the role of bile acids in digestion.</li> <li>2. Outline the pathophysiology of Gallstones and Primary Biliary Cirrhosis.</li> <li>3. Explain the mechanism of action of Ursodiol and obeticholic acid.</li> <li>4. List the pharmacokinetics of Ursodiol and obeticholic acid.</li> <li>5. List the clinical uses and common adverse effects of Ursodiol and Obeticholic acid.</li> </ol>
<b>Drugs used to treat variceal hemorrhage</b>	<b>Interactive Lecture # 10</b>	1 hour	<ol style="list-style-type: none"> <li>1. Outline the pathophysiology of Variceal Hemorrhage.</li> <li>2. List the Signs and Symptoms of upper GI bleeding.</li> <li>3. Explain the causes of Variceal Hemorrhage.</li> <li>4. Discuss the role of Octreotide, Somatostatin, Vasopressin, and Terlipressin in the management of Variceal Hemorrhage.</li> <li>5. List the pharmacokinetics of these drugs.</li> <li>6. List the clinical uses and common adverse effects of these drugs.</li> </ol>

## Pharmacology

At the end of these 1 ½ hour practical sessions, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Introduction to intravenous and oral solutions along with different types</b>	<b>Practical # 1</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define the solution.</li> <li>2. List the components of a solution.</li> <li>3. List various types of solution according to composition</li> <li>4. List various types of solution according to tonicity</li> <li>5. Give examples of the various types of intravenous and oral solutions</li> </ol>
<b>Preparation and dispensing of gel used in case of aphthous ulcer.</b>	<b>Practical # 2</b> (Task-based learning)	1 ½ hour	<ul style="list-style-type: none"> <li>• Define Gel.</li> <li>• Write down the composition of the gel used in Aphthous ulcer.</li> <li>• List the uses of the gel used in Aphthous Ulcers.</li> <li>• Draw the label of the gel used in Aphthous Ulcer</li> </ul>
<b>Preparation and dispensing of homemade ORS.</b>	<b>Practical # 3</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. List the ingredients of ORS.</li> <li>2. List the uses of ORS.</li> <li>3. Demonstrate the steps of dispensing and preparation of ORS.</li> </ol>
<b>Role of Milk Thistle (Silybum Marianum) in the management of Liver diseases</b>	<b>Practical # 4</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define Phytotherapy</li> <li>2. Discuss the importance of Phytotherapy.</li> <li>3. List the active constituents of Milk Thistle</li> <li>4. List the uses of Milk Thistle.</li> <li>5. Discuss the pharmacological role of Milk Thistle in the management of liver disease.</li> <li>6. List the adverse effects of Milk Thistle.</li> <li>7. List the drug interactions and precautions for the use of Milk Thistle.</li> </ol>

## Pharmacology

At the end of these 1 ½ tutorials, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Prescription writing of Anti-emetics</b>	<b>Tutorial # 1</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define Emesis.</li> <li>2. List the factors that cause emesis.</li> <li>3. Discuss the pharmacokinetics and pharmacodynamics of Cyclizine, Chlorpromazine.</li> <li>4. Write down the prescription of emesis.</li> </ol>
<b>Prescription writing of Acute Gastroenteritis</b>	<b>Tutorial # 2</b> (Task-based learning)	2 ½ hour	<ol style="list-style-type: none"> <li>1. Define Acute Gastroenteritis.</li> <li>2. Describe the role of I/V fluids in the management of acute Gastroenteritis.</li> <li>3. Write down the pharmacological management of acute Gastroenteritis.</li> <li>4. Write down the prescription of the given case of acute Gastroenteritis. .</li> </ol>
<b>Prescription writing of Peptic ulcer disease</b>	<b>Tutorial # 3</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define peptic ulcer.</li> <li>2. List the signs and symptoms of peptic ulcer.</li> <li>3. Discuss the pharmacokinetics and pharmacodynamics of Esomeprazole, Ranitidine, and Sucralfate.</li> <li>4. Write down the prescription of the given case.</li> </ol>
<b>Prescription writing for constipation</b>	<b>Tutorial # 4</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define constipation.</li> <li>2. Discuss the role of stool softeners (docusate sodium), lubricants (mineral oils), and prokinetic agents (Metoclopramide) in the treatment of Constipation.</li> <li>3. Write down the prescription of the given case of Constipation.</li> </ol>

## Pharmacology

At the end of these 1 ½ tutorials, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Prescription writing of Inflammatory bowel disease (Ulcerative Colitis)</b>	<b>Tutorial # 5</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define Inflammatory bowel disease.</li> <li>2. Discuss the pharmacological management of IBD.</li> <li>3. Discuss the rationale for prescribing the drugs for the pharmacological management of the given case of IBD.</li> <li>4. Write down the prescription of the given case.</li> </ol>
<b>Prescription writing on Irritable bowel syndrome</b>	<b>Tutorial # 6</b> (Task-based learning)	1 ½ hour	<ol style="list-style-type: none"> <li>1. Define irritable bowel syndrome (IBS)</li> <li>2. Discuss the pharmacological management of the given case of irritable bowel syndrome (IBS)</li> <li>3. Discuss the rationale for prescribing the drugs for the pharmacological management of the given case of irritable bowel syndrome (IBS)</li> <li>4. Write down the prescription of the given case.</li> </ol>

## Community Medicine

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Introduction to the Community Medicine</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Community Medicine.</li> <li>2. Define Health and disease and differentiate between the two concepts.</li> <li>3. Explain the concept of iceberg phenomenon in the context of disease.</li> <li>4. Describe the levels of Prevention with examples of interventions at each level of prevention.</li> </ol>
<b>Introduction to the Nutrition &amp; Proteins</b>	<b>Interactive Lecture # 2</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Nutrition, Nutrients, Food &amp; Diet</li> <li>2. Enumerate the classification of nutrients.</li> <li>3. Discuss the classification and functions of protein.</li> </ol>
<b>Macro-nutrients (Carbohydrates &amp; Lipids)</b>	<b>Interactive Lecture # 3</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe Carbohydrates and their functions.</li> <li>2. Discuss the classification of lipids.</li> <li>3. Enumerate the functions of lipids.</li> </ol>
<b>Micro- Nutrients (Vitamins – A, D, E, K, B-complex, and C)</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Vitamins</li> <li>2. Explain the classification of Vitamins.</li> <li>3. List the sources of vitamins and the important functions of vitamins.</li> <li>4. Discuss the prevention of vitamin (A, D, C) deficiencies.</li> </ol>
<b>Micro- Nutrients (Minerals Iron, Zinc, Iodine, Calcium, Fluoride)</b>	<b>Interactive Lecture # 5</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define minerals.</li> <li>2. Explain the classification of minerals.</li> <li>3. Discuss the sources and important functions of minerals</li> </ol>

## Community Medicine

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Balanced Diet Nutritional requirements and status</b>	<b>Interactive Lecture # 6</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define a balanced diet.</li> <li>2. Describe the dietary requirements of normal Human beings at different Stages of life.</li> <li>3. Discuss the assessment of the nutritional status of the community (national nutrition survey)</li> </ol>
<b>Malnutrition Macronutrients Deficiencies (LBW, Stunting, Marasmus, Kwashiorkor)</b>	<b>Interactive Lecture # 7</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Malnutrition.</li> <li>2. List the types of malnutrition.</li> <li>3. Discuss the risk factors and prevention strategies of (LBW, Stunting, Marasmus, and Kwashiorkor)</li> </ol>
<b>Micro – Nutrient Deficiencies (Zinc and Iodine Deficiencies)</b>	<b>Interactive Lecture # 8</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss Iodine deficiency disorder and its etiology.</li> <li>2. Explain the prevention and control of iodine deficiency disorder.</li> <li>3. Describe Zinc deficiency and its prevention and control.</li> </ol>
<b>Micro – Nutrient Deficiencies (Nutritional Anemia)</b>	<b>Interactive Lecture # 9</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define nutritional anemia.</li> <li>2. List the causes of nutritional anemia.</li> <li>3. Discuss the prevention of nutritional anemia.</li> </ol>
<b>Food Poisoning/ Prevention &amp; control</b>	<b>Interactive Lecture # 10</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define food poisoning.</li> <li>2. Discuss the types of food poisoning (Food infection and food toxemia)</li> <li>3. Enlist the diseases caused by food contamination.</li> </ol>

## Community Medicine

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Preservation of food and food Adulteration</b>	<b>Interactive Lecture # 11</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe the preservation of food.</li> <li>2. Define food adulteration.</li> <li>3. Explain the causes of food adulteration.</li> <li>4. Discuss the prevention of food adulteration</li> </ol>
<b>Hepatitis A/D/E Prevention and Control</b>	<b>Interactive Lecture # 12</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Hepatitis</li> <li>2. Explain the etiology of Hepatitis and list the types of hepatitis.</li> <li>3. Enlist the clinical features of Hepatitis A/D/E</li> <li>4. Discuss the prevention of Hepatitis A/D/E.</li> </ol>
<b>Hepatitis B/C Prevention and Control</b>	<b>Interactive Lecture # 13</b>	1 hour	<ol style="list-style-type: none"> <li>1. Enlist the causes of Hepatitis B and C</li> <li>2. Describe the clinical features of Hepatitis B and C.</li> <li>3. Discuss the prevention of Hepatitis B and C.</li> </ol>
<b>Typhoid / Cholera</b>	<b>Interactive Lecture # 14</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss Typhoid Fever, its etiology, and clinical features.</li> <li>2. Describe the prevention of typhoid fever.</li> <li>3. Enumerate the risk factors and clinical features of Cholera.</li> <li>4. Explain the prevention and control of cholera.</li> <li>5. Distinguish between cholera and food poisoning</li> </ol>
<b>Dysentery</b>	<b>Interactive Lecture # 15</b>	1 hour	<ol style="list-style-type: none"> <li>1. Discuss the types of dysentery and its etiology.</li> <li>2. Enumerate the clinical features of dysentery.</li> <li>3. Describe the prevention of dysentery</li> </ol>

## Community Medicine Field Visit\*

At the end of these Community Field Visits, the students of 4th year MBBS will be able to:

<p><b>R.O. Plant, Baqai Medical University Campus</b></p>	<ol style="list-style-type: none"> <li>1. Explore the various stages of the water purification process within the RO plant and grasp the significance of each step in producing clean and safe drinking water.</li> <li>2. Observe the day-to-day operations of the RO plant.</li> </ol>
<p><b>Dar-Ul-Sukun Center For The Children With Disabilities</b></p>	<ol style="list-style-type: none"> <li>1. Participants will gain insights into the foundational mission and values of Dar-ul-Sukun, understanding its commitment to providing care and support for abandoned children with disabilities.</li> <li>2. Observe and comprehend the daily operations and activities within Dar-ul-Sukun, including the living conditions, educational initiatives, and healthcare provisions for the children under its care.</li> </ol>

\*List of proposed field visits of Community Medicine

## Medicine

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Esophagitis</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Esophagitis and its types.</li> <li>2. Enlist the clinical features with which the patient presents.</li> <li>3. Formulate a proper plan for the diagnosis.</li> <li>4. How to prevent them.</li> <li>5. Briefly describe the management plan.</li> </ol>
<b>Malabsorption Syndrome</b>	<b>Interactive Lecture # 2</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define acute and chronic diarrhea and its classification.</li> <li>2. Define Celiac disease and its types.</li> <li>3. Describe its clinical features &amp; diagnosis.</li> <li>4. Outline the management plan &amp; its complications.</li> </ol>
<b>Pernicious anemia</b>	<b>Interactive Lecture # 3</b>	1 hour	<ol style="list-style-type: none"> <li>5. Define Pernicious Anemia.</li> <li>6. Discuss the pathophysiology of Pernicious anemia.</li> <li>7. Describe its clinical features &amp; diagnosis.</li> <li>8. Outline the management plan &amp; its complications.</li> </ol>

## Medicine

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Acute Viral Hepatitis</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Hepatitis and differentiate between Acute and Chronic Viral Hepatitis.</li> <li>2. Define the etiologic factor of Acute Viral Hepatitis.</li> <li>3. Discuss the pathophysiology of Hepatitis.</li> <li>4. Enlist the clinical features with which the patient presents.</li> <li>5. Formulate a proper plan for the diagnosis of viral hepatitis as well as specific investigations to explore the etiology as well as tests to determine possible complications.</li> <li>6. Prescribe symptomatic as well as curative treatment.</li> </ol>
<b>Acute Pancreatitis</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define Acute Pancreatitis &amp; what the risk factors are.</li> <li>2. Enlist the clinical presentation &amp; how to diagnose it.</li> <li>3. What are the criteria for assessing its severity?</li> <li>4. Outline the management plan &amp; its complications.</li> </ol>

## Surgery

At the end of these 1-hour interactive lectures, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Esophagus, its surgical anatomy, and common motility disorder</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe the applied surgical anatomy of the Esophagus.</li> <li>2. Identify some potential etiologies of Esophageal motility disorder.</li> <li>3. List the management options available.</li> </ol>
<b>Intestinal obstruction</b>	<b>Interactive Lecture # 2</b>	1 hour	<ol style="list-style-type: none"> <li>1. Explain the etiology and pathology of common large intestinal conditions causing an obstruction.</li> <li>2. Discuss the principles of investigations in intestinal obstruction.</li> <li>3. Explain the importance of nonsurgical management of intestinal obstruction.</li> </ol>
<b>Liver trauma and various imaging techniques used in liver disorder</b>	<b>Interactive Lecture # 3</b>	1 hour	<ol style="list-style-type: none"> <li>1. Comprehend the various aspects of Liver trauma, diagnosis, and management of Liver trauma.</li> <li>2. Discuss the various investigations used in liver disease.</li> </ol>
<b>Surgical anatomy &amp; physiology of Gall bladder and Congenital abnormality of gall bladder &amp; bile duct</b>	<b>Interactive Lecture # 4</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe the applied physiology and anatomy of the Gall bladder.</li> <li>2. Summarize the common congenital abnormalities of Gall bladder and Bile duct with their diagnosis and outcome.</li> </ol>

## Obstetrics & Gynecology

At the end of this 1-hour interactive lecture, the students of 4th year MBBS will be able to:

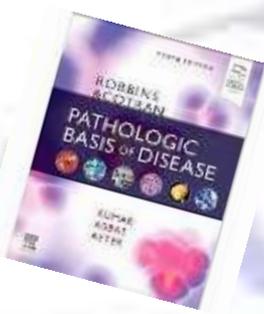
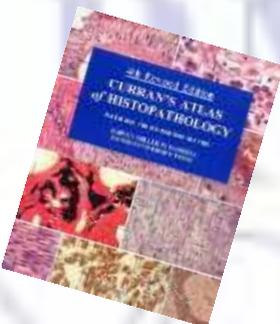
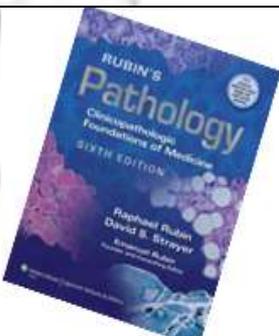
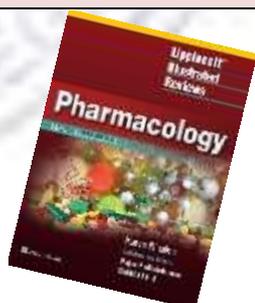
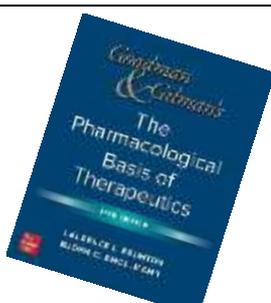
Topic	Teaching Strategy	Duration	Learning Objectives
<b>Pregnancy-related hepatic disorders</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Describe the physiological changes of the Liver during pregnancy.</li> <li>2. Classify pregnancy-related Liver disorders.</li> <li>3. Explain HELLP Syndrome.</li> </ol>

## Pediatrics

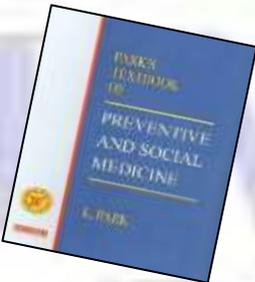
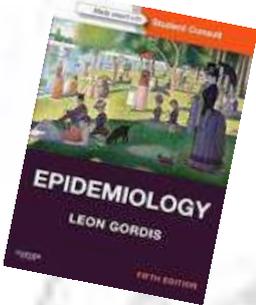
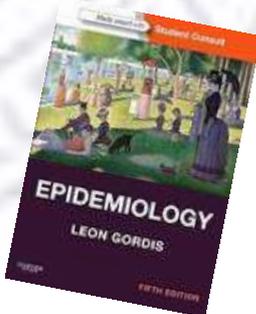
At the end of this 1-hour interactive lecture, the students of 4th year MBBS will be able to:

Topic	Teaching Strategy	Duration	Learning Objectives
<b>Protein Calorie Malnutrition (PCM) Diarrhea</b>	<b>Interactive Lecture # 1</b>	1 hour	<ol style="list-style-type: none"> <li>1. Define diarrhea and its types.</li> <li>2. Recognize clinical signs of dehydration.</li> <li>3. Assess diarrhea in sick children.</li> <li>4. Assess dehydration in young infants and sick children.</li> <li>5. Classify diarrhea and the severity of dehydration.</li> <li>6. Provide management plans A, B, and C for dehydration.</li> <li>7. Counsel the caregiver about home treatment for diarrhea and dehydration.</li> </ol>

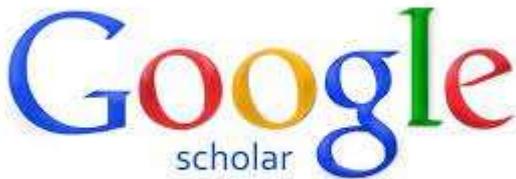
## SUGGESTED READING BOOKS

PATHOLOGY			
<p><b>Robbins &amp; Cotran Pathologic Basis of Disease</b> 10<sup>th</sup> Edition Kumar, Abbas &amp; Aster</p>		<p><b>Pathology Illustrated</b> 8<sup>th</sup> Edition Alasdair D. T. Govan</p>	
<p><b>Curran's Atlas of Histopathology</b> 4<sup>th</sup> Edited Edition Robert Curran</p>		<p><b>Rubin's Pathology: Clinicopathologic Foundations of Medicine</b> 6<sup>th</sup> Edition Raphael Rubin &amp; David S. Strayer</p>	
PHARMACOLOGY & THERAPEUTICS			
<p><b>Basic and Clinical Pharmacology</b> 14<sup>th</sup> Edition Bertram Katzung</p>		<p><b>Lippincott's illustrated review of Pharmacology</b> 7<sup>th</sup> Edition Karen Whalen</p>	
<p><b>Katzung and Trevor's Pharmacology Examination and Board Review</b> 14<sup>th</sup> Edition Katzung and Trevor</p>		<p><b>Goodman &amp; Gillman The Pharmacological Basis of Therapeutics</b> 14<sup>th</sup> Edition Laurence L Brunton &amp; Bjorn C. Knollmann</p>	

## SUGGESTED READING BOOKS

COMMUNITY MEDICINE			
<p><b>Public Health &amp; Community Medicine</b> 8<sup>th</sup> Edition M. Ilyas</p>		<p><b>Public Health &amp; Preventive Medicine</b> 13<sup>th</sup> Edition Maxcy- Rosenau-Last</p>	
<p><b>Park's Textbook of Preventive &amp; Social Medicine</b> 20<sup>th</sup> Edition K. Parks</p>		<p><b>Epidemiology</b> 5th Edition Leon Gordis</p>	
RESEARCH METHODOLOGY			
<p><b>Introduction to Research in Health Sciences-</b> Stephen Polgar, Shane A. Thomas</p>		<p><b>Epidemiology</b> 5th Edition Leon Gordis</p>	

## SUGGESTED WEBSITES & SEARCH ENGINES

	
<p><a href="https://www.medscape.com">https://www.medscape.com</a></p>	<p><a href="https://www.PathologyOutlines.com">https://www.PathologyOutlines.com</a></p>
	
<p><a href="https://pubmed.ncbi.nlm.nih.gov">https://pubmed.ncbi.nlm.nih.gov</a></p>	<p><a href="https://scholar.google.com">https://scholar.google.com</a></p>
	
<p><a href="https://medlineplus.gov">https://medlineplus.gov</a></p>	<p><a href="https://medicine.nus.edu.sg/pathweb">https://medicine.nus.edu.sg/pathweb</a></p>

## ASSESSMENT METHODS

### 1. Formative Assessment

- Assignment
- Quiz (face-to-face or online)
- Student Presentation
- Class participation in small group discussions and case-based learning sessions
- Project / Poster

\* 4<sup>th</sup> Year MBBS Students are requested to maintain their practical journals and logbooks for formative assessment.

### 2. Summative Assessment

#### Modular Exam:

With reference to the Assessment Policy of BMC, dated 14-06-21) (Point 5: Process; Summative assessment points a, b & d); a single modular exam will be conducted at the end of each module which will include all the subjects of basic medical sciences.

\*The Integrated Module Exam will be assessed by any of the following assessment methods:

- MCQ
- SEQ
- OSPE

#### Annual Exam:

- Internal Evaluation = 20%
- Final Exam= 80%

Theory: MCQs, EMQs & SAQs Practical: Viva & OSPE





**Baqai Medical College**  
**Baqai Medical University**

51-Deh Tor, Gadap Road, Superhighway. P.O Box: 2407, Karachi-75340, Pakistan.

(092-21)34410-293 to 298, 34410-427 to 430

Fax: (092-21)34410-317, 34410-431

Email: [info@baqai.edu.pk](mailto:info@baqai.edu.pk), Web: [www.baqai.edu.pk/](http://www.baqai.edu.pk/)



**Baqai Medical College**  
**4<sup>th</sup> Year MBBS Session 2024 - 2025**  
**GIT and Hepatobiliary Module**



**1<sup>st</sup> Week (From 18<sup>th</sup> March 2024 to 22<sup>nd</sup> March 2024)**

Day	Lecture 1 8:30 – 9:15	Lecture 2 9:15 – 10:00	Clinics 10:00 – 12:30	Practical / Small Group Discussion 12:30 – 2:30 Prayers Break (1:25 – 1:40)
<b>Day 1</b> Monday 18-3-24	<b>Inflammatory &amp; ulcerative lesions of the oral cavity</b> [Pathology] (Dr. Ghazal Irfan) [Pathology Lecture Hall]	<b>Disorders of the Salivary glands</b> [Pathology] (Dr. Munazza Rashid) [Pathology Lecture Hall]	<b>Clinics</b>	Group A: Pathology Group B: Pharmacology Group C: Research Group D: SDL
<b>Day 2</b> Tuesday 19-3-24	<b>Tumors of the Oral Cavity</b> [Pathology] (Dr. Muhammad Rizwan) [Pathology Lecture Hall]	<b>Introduction to Community Medicine</b> Community Medicine (Prof. Dr. Nasir Jameel) [Com Med Lecture Hall]	<b>Clinics</b>	Group A: Pharmacology Group B: Research Group C: SDL Group D: Pathology
<b>Day 3</b> Wednesday 20-3-24	<b>Congenital disorders of the Esophagus</b> [Pathology] (Dr. Muhammad Khan) [Pathology Lecture Hall]	<b>Drugs that affect motility &amp; Antisecretory drugs</b> (Dr. Farhat Javed) [Pathology Lecture Hall]	<b>Clinics</b>	Group A: Research Group B: SDL Group C: Pathology Group D: Pharmacology
<b>Day 4</b> Thursday 21-3-24	<b>Inflammatory disorders of the Esophagus</b> Pathology (Dr. Maeesa Sajeel) [Pathology Lecture Hall]	<b>Introduction to Nutrition and Dietetics</b> Community Medicine (Dr. Munazza Rashid) [Pathology Lecture Hall]	<b>Clinics</b>	Group A: SDL Group B: Pathology Group C: Pharmacology Group D: Research
<b>Day 5</b> Friday 22-3-24	<b>Tumors of the Esophagus</b> Pathology (Dr. Nasima Iqbal) [Pathology Lecture Hall]	<b>Motility disorders of Esophagus</b> [Medicine] (Dr. Adeel Ahmed) [Lecture Hall 13]	<b>Clinics</b>	Group A & B: [Pathology] <b>Barrett's Esophagitis &amp; Esophageal varices</b> (Dr. Tooba Khan) [Hematology Lab] Group C & D: [Pharmacology] <b>Prescription Writing of Antiemesis</b> (Dr. Humaira/ Dr. Sehrish) [Pharmacology Lab]

**Pathology SGD:** Disorders of the Oral Cavity

**Venue:** Pathology Lecture Hall

**Facilitators:** Dr. Sana Muharak/ Dr. Rozina Khan

**Pharmacology Practical:** Introduction to intravenous and oral solutions along with their different types. **Facilitators:** Dr. Javeria/ Dr. Sehrish

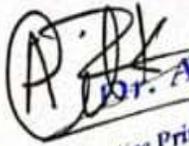
**Venue:** Pharma Lab

  
**Dr. Adil Khan**  
 MBBS, MCPS, FCPS  
 Vice Principal (Academics)  
 Baqai Medical College

**Baqai Medical College**  
**4<sup>th</sup> Year MBBS Session 2024 - 2025**  
**GIT and Hepatobiliary Module**  
**2<sup>nd</sup> Week (From 25<sup>th</sup> March 2024 to 29<sup>th</sup> March 2024)**

Day	Lecture 1 8:30 – 9:15	Lecture 2 9:15 – 10:00	Clinics 10:00 – 12:30	Practical / Small Group Discussion 12:30 – 2:30 Prayers Break (1:25 – 1:40)
Day 6 Monday 25-3-24	<b>Acute Gastritis</b> Pathology (Dr. Sarah Azhar) [Pathology Lecture Hall]	<b>Surgical anatomy and common motility disorders of the Esophagus</b> [Surgery] (Dr. Danish Muneeb) [LRC, Department of Surgery]	Clinics	Group A & B: [Pharmacology] <b>Prescription Writing of Antiemesis</b> (Dr. Humaira/ Dr. Sehrish) [Pharmacology Lab] Group C & D: [Pathology] <b>Barrett's Esophagitis &amp; Esophageal varices</b> (Dr. Tooba Khan) [Hematology Lab]
Day 7 Tuesday 26-3-24	<b>Chronic Gastritis</b> Pathology (Dr. Muhammad Khan) [Pathology Lecture Hall]	<b>Macronutrients (Lipids &amp; Carbohydrates)</b> Community Medicine (Prof. Dr. Nazia Jameel) [Com Med Lecture Hall-1]	Clinics	Group A: SDL Group B: Pathology Group C: Pharmacology Group D: Research
Day 8 Wednesday 27-3-24	<b>Peptic Ulcer Disease</b> Pathology (Dr. Ghazal Irfan) [Pathology Lecture Hall]	<b>Drugs for Peptic Acid Disease – I</b> [Pharmacology] (Prof. Dr. Asif/Dr. Urooj) [Pathology Lecture Hall]	Clinics	Group A: Pathology Group B: Pharmacology Group C: Research Group D: SDL
Day 9 Thursday 28-3-24	<b>Drugs for Peptic Acid Disease – II</b> [Pharmacology] (Dr. Urooj/ Dr. Humaira) [Pathology Lecture Hall]	<b>Micronutrients (Vitamins A, D, E, K, B &amp; C)</b> [Community Medicine] (Prof. Dr. Nazia Jameel) [Com Med Lecture Hall-1]	Clinics	Group A: Pharmacology Group B: Research Group C: SDL Group D: Pathology
Day 10 Friday 29-3-24	<b>Tumors of the Stomach</b> [Pathology] (Dr. Nasima Iqbal) [Pathology Lecture Hall]		Clinics	Group A: Research Group B: SDL Group C: Pathology Group D: Pharmacology

**Pathology SGD (\*Student's Presentation):** Acid Peptic Disease **Venue:** Pathology Lecture Hall **Facilitator:** Muhammad Rizwan/ Muhammad Uzair  
**Pharmacology:** Preparation & dispensing of Gel used in case of Aphthous Ulcer **Venue:** Pharma Lab **Facilitators:** Dr. Sumreen/ Dr. Hina Masood

  
**Dr. Adil Khan**  
 MBBS, MCPS, FCPS  
 Vice Principal (Academics)  
 Baqai Medical College

**Baqai Medical College**  
**4<sup>th</sup> Year MBBS Session 2024 - 2025**  
**GIT and Hepatobiliary Module**  
**3<sup>rd</sup> Week (From 1<sup>st</sup> April 2024 to 5<sup>th</sup> April 2024)**

Day	Lecture 1 8:30 – 9:15	Lecture 2 9:15 – 10:00	Clinics 10:00 – 12:30	Practical / Small Group Discussion 12:30 – 2:30 Prayers Break (1:25 – 1:40)
Day 11 Monday 1-4-24	<b>Congenital anomalies of the Intestines</b> [Pathology] (Dr. Munazza Rashid) [Pathology Lecture Hall]	<b>Balanced Diet Nutritional requirements and status</b> Community Medicine (Dr. Amara Altaf) [Com Med Lecture Hall 1]	Clinics	Group A & B: [Pathology] <b>Gastroenteritis</b> (Muhammad Uzair/ Muhammad Rizwan) [Pathology Lecture Hall] Group C & D: Pharmacology <b>Prescription Writing on Peptic Ulcer Disease</b> (Dr Izrum/ Dr Sehrish) [Pharmacology Lab]
Day 12 Tuesday 2-4-24	<b>Inflammatory Bowel Diseases- I</b> [Pathology] (Dr. Muhammad Rizwan) [Pathology Lecture Hall]	<b>Micronutrients – Minerals</b> (Iron, Zinc, Iodine, Calcium, Fluoride) Community Medicine (Prof. Dr. Nadeem Baqai) [Com Med Lecture Hall 1]		Group A & B: Pharmacology <b>Prescription Writing on Peptic Ulcer Disease</b> (Dr Izrum/ Dr Sehrish) [Pharmacology Lab] Group C & D: [Pathology] <b>Gastroenteritis</b> (Muhammad Uzair/ Muhammad Rizwan) [Pathology Lecture Hall]
Day 13 Wednesday 3-4-24	<b>Inflammatory Bowel Diseases- II</b> [Pathology] (Dr. Maeesa Sajeeel) [Pathology Lecture Hall]	<b>Drugs used in Inflammatory Bowel Diseases</b> Pharmacology (Dr Faraz/ Dr Amin/ Masood) [Pathology Lecture Hall 1]		Group A & B: [Pathology] <b>Diarrheal Diseases</b> (Dr. Nadeem Baqai/ Dr. Sana Mubarak) [Pathology Lecture Hall] Group C & D: Pharmacology <b>Prescription Writing on Inflammatory Bowel Diseases</b> (Dr Javeria/ Dr Sehrish) [Pharmacology Lab]
Thursday 4-4-24	<b>Shaheed Zulfiqar Ali Bhutto Day Holiday* (Tentative) Subject to BMU Notification</b>			
Day 14 Friday 5-4-24	<b>Vascular disorders of the Intestines</b> [Pathology] (Dr. Sarah Azhar) [Pathology Lecture Hall]	<b>Malnutrition: Macronutrient deficiencies</b> (LBW, Marasmus, Stunting, Kwashiorkor) [Community Medicine] (Dr. Amara Altaf) [Com Med Lecture Hall 1]	Clinics	Group A & B: Pharmacology <b>Prescription Writing on Inflammatory Bowel Diseases</b> (Dr Javeria/ Dr Sehrish) [Pharmacology Lab] Group C & D: [Pathology] <b>Diarrheal Diseases</b> (Dr. Nadeem Baqai/ Dr. Sana Mubarak) [Patho Lec Hall]

**Dr. Adil Khan**  
 MBBS, MCPS, FCPS  
 Vice Principal (Academics)  
 Baqai Medical College





Baqai Medical College  
4<sup>th</sup> Year MBBS Session 2024 - 2025  
GIT and Hepatobiliary Module



4<sup>th</sup> Week (From 8<sup>th</sup> April 2024 to 12<sup>th</sup> April 2024)

Day	Lecture 1 8:30 – 9:15	Lecture 2 9:15 – 10:00	Clinics 10:00 – 12:30	Practical / Small Group Discussion 12:30 – 2:30 Prayers Break (1:25 – 1:40)
Day 15 Monday 8-4-24	<b>Micronutrient deficiencies</b> (Zinc and Iodine) [Community Medicine] (Dr. Amara Altaf) [Com Med Lecture Hall 1]	<b>Drugs used to treat irritable bowel syndrome.</b> [Pharmacology] (Dr Sehrish/ Dr Faraz) [Pathology Lecture Hall]	Clinics	Group A & B: [Pathology] <b>Intestinal Diseases</b> (Dr. Rozina Khan/Dr. M Yasir Rishi) [Pathology Lecture Hall] Group C & D: Pharmacology <b>Prescription Writing on Irritable Bowel Syndrome</b> (Dr Sehrish/ Dr Javeria) [Pharmacology Lab]
Day 16 Tuesday 9-4-24	<b>Micronutrient deficiencies</b> (Nutritional Anemia) [Community Medicine] (Dr. Amara Altaf) [Com Med Lecture Hall 1]	<b>Pernicious Anemia</b> [Medicine] (Dr. Bushra Raza) [Lecture Hall 13]	Clinics	Group A & B: Pharmacology <b>Prescription Writing on Irritable Bowel Syndrome</b> (Dr Sehrish/ Dr Javeria) [Pharmacology Lab] Group C & D: [Pathology] <b>Intestinal Diseases</b> (Dr. Rozina Khan/Dr. M Yasir Rishi) [Pathology Lecture Hall]
Wednesday 10-4-24	Eid-ul-Fitr Holiday* (Tentative Subject to BMU Notification)			
Thursday 11-4-24	Eid-ul-Fitr Holiday* (Tentative Subject to BMU Notification)			
Friday 12-4-24	Eid-ul-Fitr Holiday* (Tentative Subject to BMU Notification)			



  
**Dr. Adil Khan**  
MBBS, MCPS, FCPS  
Vice Principal (Academics)  
Baqai Medical College



**Baqai Medical College**  
**4<sup>th</sup> Year MBBS Session 2024 - 2025**  
**5<sup>th</sup> Week (From 15<sup>th</sup> April 2024 to 19<sup>th</sup> April 2024)**



Day	Lecture 1 8:30 – 9:30	Lecture 2 9:30 – 10:30	10:30 - 10:45	Clinics 10:45 – 1:45	1:45 - 2:00	Practical / Small Group Discussion 2:00 – 4:30	
<b>Day 17 Monday 15-4-24</b>	<b>Polyps of the intestine</b> [Pathology] (Dr. Ghazal Irfan) [Pathology Lecture Hall]	<b>Intestinal Obstruction</b> [Surgery] (Dr. Abdul Ghaffar) [LRC, Department of Surgery]	T E	Clinics	P R	<b>Anti-diarrheal agents</b> [Pharmacology] Interactive Lecture (Dr. Humaira \ Dr Urooj) [Patho Lecture Hall]	<b>Malabsorption Syndromes</b> [Pathology] Interactive Lecture (Dr. Maeesa Sajeel) [Patho Lecture Hall]
<b>Day 18 Tuesday 16-4-24</b>	<b>Intestinal Tumors</b> [Pathology] (Interactive Lecture) (Dr. Muhammad Rizwan) [Pathology Lecture Hall]	<b>Protein Calorie Malnutrition (PCM) Diarrhea</b> [Pediatrics] (Dr. Madiha Abid) [Pathology Lecture Hall]	A B R	Clinics	A Y E	Group A: Pathology Group B: Pharmacology Group C: SDL Group D: Research	
<b>Day 19 Wednesday 17-4-24</b>	<b>Typhoid, Cholera &amp; Dysentery</b> [Community Medicine] (Dr. S. Nauman Raza) [Com Med Lecture Hall 1]	<b>Malabsorption Syndromes</b> [Medicine] (Dr. Masooda Rauma) [Lecture Hall 13]		Clinics	R	Group A: Research Group B: Pathology Group C: Pharmacology Group D: SDL	
<b>Day 20 Thursday 18-4-23</b>	<b>Laxatives</b> [Pharmacology] (Dr. Javeria/ Dr Hina Masood) [Pathology Lecture Hall]	<b>Food Poisoning: its prevention and control</b> [Community Medicine] (Dr. Masooda Rauma) [Com Med Lecture Hall 1]	A K	Clinics	S	Group A: Community Field Visit Group B: Research Group C: Pathology Group D: Pharmacology	
<b>Day 21 Friday 19-4-23</b>	8:30 – 9:30	9:30 – 10:30	10:30 – 1:30		1:30 – 2:00	2:00 – 4:30	
	<b>Case-based Learning</b>		<b>Clinics</b>		Jumma Prayers	Group A: Pharmacology Group B: SDL Group C: Research Group D: Pathology	

**Pathology Practical:** Juvenile Rectal Polyps, Colorectal Carcinoma & Acute appendicitis **Venue:** Pathology Museum  
**Pharmacology Tutorial:** Prescription writing on Acute Gastroenteritis **Venue:** Pharma Lab

**Facilitator:** Dr. Nadeem Baqai/ Dr. Tooba Khan  
**Facilitator:** Dr Hina Masood/ Dr Sehrish

**GIT and Hepatobiliary Module**

*Dr. Adil Khan*  
 MBBS, MCPS, FCPS  
 Vice Principal (Academics)  
 Baqai Medical College

Day	Lecture 1 8:30 – 9:30	Lecture 2 9:30 – 10:30	10:30 - 10:45	Clinics 10:45 – 1:45	1:45 - 2:00	Practical / Small Group Discussion 2:00 – 4:30	
Day 22 Monday 22-4-24	Hepatitis - I [Pathology] (Dr. Nasima Iqbal) [Pathology Lecture Hall]	Hepatitis- II [Pathology] (Dr. Nasima Iqbal) [Pathology Lecture Hall]	T E	Clinics	P R	Group A: SDL Group B: Pathology Group C: Pharmacology Group D: Research	
Day 23 Tuesday 23-4-24	Liver Cirrhosis & its Complications [Pathology] (Dr. Muhammad Khan) [Pathology Lecture Hall]	Drugs used to treat Variceal Hemorrhage [Pharmacology] (Prof Dr. Nadeem Dr. Humaira) [Pathology Lecture Hall]	A B	Clinics	A Y	Group A: Pathology Group B: Pharmacology Group C: Research Group D: SDL	
Day 24 Wednesday 24-4-24	Hepatitis A/D/E: Prevention & Control [Community Medicine] (Dr. Muneer Ahmed) [Com Med Lecture Hall 1]	Acute Viral Hepatitis [Medicine] (Dr. Dania Iqbal) [Lecture Hall 2]	R E	Clinics	E R	Group A: Pharmacology Group B: Research Group C: SDL Group D: Pathology	
Day 25 Thursday 25-4-24	Liver trauma & various imaging techniques used in Liver disorders. [Surgery] (Dr. Abdullah) [LRC, Department of Surgery]	Hepatitis B & C: Prevention & Control [Community Medicine] (Dr. Muneer Ahmed) [Community Lecture Hall 1]	Group B: Community Field Visit			A K	Group A: Research Group C: Pathology Group D: Pharmacology
Day 26 Friday 26-4-24	8:30 – 9:30 Hepatic failure, Massive Liver Necrosis, and Hepatocellular Carcinoma [Pathology] (Dr. Ghazal Irfan) [Pathology Lecture Hall]	9:30 – 10:30 Pregnancy-related Hematic Disorders [Obstetrics & Gynecology] (Dr Nazish) [Pathology Lecture Hall]	10:30 – 1:30	Clinics	1:30 – 2:00 Jumma Prayers	2:00 – 4:30 Alcoholic/ non-alcoholic liver disease & Liver Abscess [Pathology] (Interactive Lecture) (Dr. Munazza Rashid) [Pathology Lecture Hall]	

Pathology Practical: Hepatitis & Liver Cirrhosis

Pharmacology Practical: Preparation and dispensing of ORS

Venue: Hematology Lab

Venue: Pharmacology Lab

Facilitator: Dr. Sana Mubarak/ Dr. Rozina Khan

Facilitator: Dr. Sumreen\ Dr Hina Masood

  
**Dr. Adil Khan**  
MBBS, MCPS, FCPS  
Vice Principal (Academics)  
Baqai Medical College



**Baqai Medical College**  
**4<sup>th</sup> Year MBBS Session 2024 - 2025**  
**GIT and Hepatobiliary Module**



**7<sup>th</sup> Week (From 29<sup>th</sup> April 2024 to 3<sup>rd</sup> May 2024)**

Day	Lecture 1 8:30 – 9:30	Lecture 2 9:30 – 10:30	10:30 - 10:45	Clinics 10:45 – 1:45	1:45 - 2:00	Practical / Small Group Discussion 2:00 – 4:30
<b>Day 26</b> <b>Monday</b> 29-4-24	<b>Hepatic failure, Massive Liver Necrosis, and Hepatocellular Carcinoma</b> [Pathology] (Dr. Ghazal Irfan) [Pathology Lecture Hall]	<b>Pregnancy-related Hepatic Disorders</b> [Obstetrics & Gynecology] (Dr Nazish) [Pathology Lecture Hall]	T E A	Clinics	P R A	<b>Alcoholic/ non-alcoholic liver disease &amp; Liver Abscess</b> [Pathology] (Interactive Lecture) (Dr. Munazza Rashid) [Pathology Lecture Hall]
<b>Day 27</b> <b>Tuesday</b> 30-4-24	<b>Cholelithiasis &amp; Cholecystitis</b> [Pathology] (Dr. Sarah Azhar) [Pathology Lecture Hall]	<b>Surgical anatomy &amp; physiology of gall bladder &amp; congenital abnormalities of gall bladder &amp; bile duct surgery</b> (Dr. Abid Owais) [LRC, Department of Surgery]	B R E	Clinics	Y E R	Group A: SDL Group B: Pathology Group C: Pharmacology (P) Group D: Pharmacology (T)
<b>Wednesday</b> 1-5-24	<b>Lab Day (Holiday * Venetive Subject to BMU Notification)</b>					
<b>Day 28</b> <b>Thursday</b> 2-5-24	<b>Pancreatitis &amp; Pancreatic Carcinoma</b> [Pathology] (Dr. Muhammad Khan) [Pathology Lecture Hall]	<b>Bile Acid Agents</b> [Pharmacology] (Dr. Javeria/ Dr. Humaira) [Pathology Lecture Hall]	<b>Group B: Community Field Visit</b>			
			A K	Clinics	S	Group A: Pharmacology (T) Group C: Pathology Group D: Pharmacology (P)
<b>Day 29</b> <b>Friday</b> 3-5-24	<b>Biliary Diseases</b> [Pathology] (Dr. Nasima Iqbal) [Pathology Lecture Hall]	<b>Preservation of food &amp; Food Adulteration</b> Community Medicine (Dr. Munir Shaikh) [Com Med Lecture Hall 1]	10:30 – 1:30	Clinics	1:30- 2:00 Jumma Prayers	2:00 – 4:30 Group A: Pharmacology (P) Group B: Pharmacology (T) Group C: SDL Group D: Pathology

**Pathology Practical:** Chronic Cholecystitis and Pancreatitis

**Pharmacology Practical:** Role of Milk Thistle in the management of Liver diseases

**Pharmacology Tutorial:** Prescription writing of Constipation

**Facilitator:** Dr. Nadeem Baqai/ Dr. M Yasir Rishi

**Facilitator:** Dr. Hina Masood/ Dr Sumreen

**Facilitator:** Dr. Javeria/ Dr. Humaira

**Venue:** Histopathology Museum

**Venue:** Pharma Lab

**Venue:** Hematology Lab


**Dr. Adil Khan**  
 MBBS, MCPS, FCPS  
 Vice Principal (Academics)  
 Baqai Medical College



Baqai Medical College  
4<sup>th</sup> Year MBBS Session 2024 - 2025



End of GIT and Hepatobiliary Module and Commencement of Musculoskeletal Module  
8<sup>th</sup> Week (From 6<sup>th</sup> May 2024 to 10<sup>th</sup> May 2024)

Day	Lecture 1 8:30 – 9:30	Lecture 2 9:30 – 10:30	10:30 - 10:45	Clinics 10:45 – 1:45	1:45 - 2:00	Practical / Small Group Discussion 2:00 – 4:00
Day 30 Monday 6-5-24	Acute Pancreatitis [Medicine] (Dr. Dania Faisal) [Lecture Hall 13]	Pancreatic enzyme supplements [Pharmacology] (Dr Faraz/ Dr Izrum) [Pathology Lecture Hall]	T E A B R E	Clinics	P R A Y E R S	Group A: Pathology Group B: Pharmacology (P) Group C: Pharmacology (T) Group D: SDL
Tuesday 7-5-24	1 <sup>st</sup> Integrated Module Assessment (Theory)			Clinics		1 <sup>st</sup> Integrated Module Assessment (OSPE)
Day 31 Wednesday 8-5-24	Introduction to Occupational Health [Community Medicine] (Prof. Dr. Nazia Jameel/ Dr. Amara Altaf) [Com Med Lecture Hall 1]	Acquired disorders of the Bone and Cartilage [Pathology] (Dr. Muhammad Rizwan) [Pathology Lecture Hall]		Clinic		Group A: Research Group B: SDL Group C: Pathology Group D: Pharmacology
Day 32 Thursday 9-5-24	Vasoactive Peptides [Pharmacology] (Dr. Hina Masood/ Dr. Sehrish) [Pathology Lecture Hall]	Occupational Hazards [Community Medicine] (Prof. Dr. Nazia Jameel/ Dr. Amara Altaf) [Com Med Lecture Hall 1]		Group C: Community Field Visit		Group A: Pharmacology Group B: Research Group D: Pathology
Day 33 Friday 10-5-24	8:30 – 9:30	9:30 – 10:30	10:30 – 1:30	1:30- 2:00	2:00 – 4:00	
	Fractures and Osteonecrosis [Pathology] (Dr. Maeesa Sajeel) [Pathology Lecture Hall]	Bone fractures & their management [Orthopedic Surgery] (Prof. Ghulam Mustafa Khaimkhani) [LRC, Deptt of Surgery]	Clinics	Jumma Prayers	Group A: Pathology Group B: Pharmacology Group C: Research Group D: SDL	

**For Monday:**

**Pathology Practical:** Chronic Cholecystitis and Pancreatitis

**Pharmacology Practical:** Role of Milk Thistle in the management of Liver diseases

**Pharmacology Tutorial:** Prescription writing of Constipation

**For Wednesday to Friday:**

**Pathology SGD:** Developmental Disorders of the Bone and Cartilage

**Pharmacology:** Preparation and Dispensing of Topical Analgesic Ointment.

**Facilitator:** Dr. Nadeem Baqai/ Dr. M Yasir Rishi

**Facilitator:** Dr. Hina Masood/ Dr Sumreen

**Facilitator:** Dr. Javeria/ Dr. Humaira

**Facilitator:** Dr. Rozina Khan/ Dr. Tooba Khan

**Facilitator:** Dr. Samreen/ Dr Hina Masood

**Venue:** Histopathology Museum

**Venue:** Pharma Lab

**Venue:** Hematology Lab

**Venue:** Pathology Lecture Hall

**Venue:** Pharma Lab

**Dr. Adil Khan**  
MBBS, MCPS, FCPS  
Vice Principal (Academics)