



STUDY GUIDE

THIRD YEAR COURSE

Department of Pathology King Edward Medical University,
Lahore

DEPARTMENT OF PATHOLOGY

VISION

To be a center of excellence in pathological sciences and medical research, delivering high-quality medical education and fostering innovation in alignment with the standards of the Pakistan Medical and Dental Council, while contributing to the development of competent healthcare professionals.

MISSION

To provide integrated, competency-based, clinically relevant, and research-oriented pathological education through modern teaching methodologies; to foster critical thinking and professionalism; and to prepare competent healthcare professionals who serve society with excellence, ethics, and innovation.

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MESSAGE OF HEAD OF DEPARTMENT

Dear Students,

Welcome to the 3rd year & 4th year of your medical education. This study guide has been developed to support and streamline your learning process. It is intended to provide clear guidance regarding the course objectives, organization of content and the expected learning outcomes. The curriculum is designed to foster not only sound knowledge of pathology but also essential clinical correlations, practical skills, and professional attitudes required of a competent medical graduate.

This year reflects our commitment to academic excellence, professional integrity and holistic medical development. I encourage you to engage actively, think critically, and take ownership of your learning. The foundation you build now will shape your future as competent, compassionate, and responsible physicians.

Pathology remains the structural foundation of your basic & clinical sciences training, forming the conceptual framework upon which all future clinical learning is built. A sound understanding of human pathology macroscopic, microscopic, and radiological is essential for safe practice, accurate diagnosis, and professional competence. Our department is dedicated to ensuring that your knowledge of pathology is rigorous, clinically contextualized, and aligned with contemporary standards.

Remember that your success will be built on a foundation of consistent effort, a questioning mind, and a commitment to academic integrity. We remain committed to supporting your growth in both knowledge and character.

We hope that your academic journey in the Department of Pathology will be intellectually rewarding, professionally enriching, and will equip you with the essential competencies required for your future clinical practice.

Prof. Dr. Faiza Bashir
Chairperson, Pathology Department
King Edward Medical University, Lahore

FACULTY LIST OF PATHOLOGY STAFF

Sr. No.	Name	Designation
28.	Prof. Dr. Faiza Bashir	Chairperson
29.	Prof. Dr. Ambareen Hamid	Professor of Pathology
30.	Prof. Dr. Mizna Arif	Professor of Pathology
31.	Dr. Samreen Hameed	Associate Professor
32.	Dr. Hina Bukhair	Associate Professor
33.	Dr. Samina Qamar	Associate Professor
34.	Dr. Safeena Sarfraz	Assistant Professor
35.	Dr. Muna Malik	Assistant Professor
36.	Dr. Sindhu Rehman	Assistant Professor
37.	Dr. Rukhsana Tumrani	Assistant Professor
38.	Dr. Maryam Zahid	APWMO
39.	Dr. Huma Sheikh	Demonstrator
40.	Dr. Rafeeda Maab	Demonstrator
41.	Dr. Rabia Altaf	Demonstrator
42.	Dr. Sarah Iqbal Ch.	Demonstrator
43.	Dr. Shahzad Ahmad	Demonstrator
44.	Dr. Asad Ahmad Shabbir	Demonstrator
45.	Dr. Anum Rouf	Demonstrator
46.	Dr. Qurrat-ul-Ain	Demonstrator
47.	Dr. Khadija Iqbal	Demonstrator
48.	Miss. Hiba	Lecturer

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INTRODUCTION TO STUDY GUIDE

Dear student,

Welcome to the 3rd and 4th year Pathology Course. The department of Pathology will be facilitating the course. You will have 130 lectures in 3rd year and 134 lectures in 4th year, learning the different aspects of the subject.

The purpose of the study guide is to help you learn the subject of Pathology. It is designed to help you manage your learning and access the resources available to you. It takes you through the general objectives of learning the subject, divides the subject into modules for easy learning and helps you understand the course work, practical skills and attitudes that are desired of a good doctor.

The basic sciences courses you did in the last two years are pre-requisites for the course of Pathology and will help you in better understanding of the subject and its application to actual patients. We advise you to refer back to these subjects if there are any issues in understanding the subject. We hope you will realize how integrated these subjects are to your clinical practice.

Methods of assessment, have also been written so that you can relate teaching to assessment and have a fair idea of the assessment methods and what internal and external assessment is all about.

We hope the students take time out to go through the guide and to use it effectively to learn the subject of Pathology. We look forward to feed back from the students and faculty so that the guide can be improved further.

For any assistance please do not hesitate to contact the teaching faculty of the department of Pathology. Alternatively, please feel free to visit the head of the department for any issues that you face in learning of the subject or otherwise.

We hope that your rotation in our department will be very fruitful and enjoyable and will equip you for future practical life.

With compliments from:

Head of department and members of faculty, Department of Pathology.

OBJECTIVES OF CURRICULUM

General objectives of under graduate Pathology teaching and training are to equip the students with essential knowledge, so that they are able to:

- Establish the diagnosis of a disease by concepts of etiology, incidence and risk factors.
- Identify and grasp the pathogenesis.
- Establish the lab diagnosis with multiple parameters and bacterial infection
- Grasp the concepts of related given disease by definition, morphology structure and class format.
- Prevention and basic concepts of antibiotics, antifungals, antivirals and antiprotozoal drugs.
- Practical observation of all given diseases.
- Establish the concept of all basics of all pathogens and diseases.
- Have the knowledge and correlation of infection control and prevention.
- Have the concept of drug stewardship
- Have knowledge of lab procedures and serology.
- Have knowledge of essential lab equipment.
- Understand the principles of medical research, emerging diseases including fundamentals of informative technology.
- Understand the principles of working in different sections of pathology lab.

KEMU Curricular Map: A Competency-Based Framework

3rd YEAR MBBS Modular Integrated Framework

Period	Modules	Horizontal Integration	Skill component	Vertical Integration
January to February	Generalized Module (02-01-2025 to 13-01-2025) 1st Inter Module (14-01-2025 to 30-01-2025) Inflammation (01-02-2025 to 15-02-2025) 2nd Inter Module (17-02-2025 to 25-03-2025)	Pathology Pharmacology Forensic Medicine Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, ENT, Eye, Orthopedic, Physiology, Dermatology, Behavioral Sciences Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater
Assessment written component (MCQ's & SEQ's)				
March to May	Special Microbiology (06-03-2025 to 21-05-2025) Immunity (29-05-2025 to 05-06-2025)	Pathology Pharmacology Forensic Medicine Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, ENT, Eye, Orthopedic, Physiology, Dermatology, Urology, DME, Behavioral Sciences Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater
Assessment written component (MCQ's & SEQ's)				
July to September	Hemodynamics (10-07-2025 to 24-07-2025) 3rd Inter Module (25-07-2025 to 13-08-2025) 4th intermodule (15-08-2025 to 10-09-2025) Neoplasia (11-09-2025 to 20-09-2025)	Pathology Pharmacology Forensic Medicine Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater	<ul style="list-style-type: none"> • Practical • Tutorial • Clinical ward/ Rotation 	Medicine, Surgery, ENT, Eye, Orthopedic, Physiology, Dermatology, Urology, DME, Oncology, Community Medicine, Behavioral Sciences Interactive Lecture SDL <u>VENUE:</u> Forensic Lecture Theater
Assessment written component (MCQ's & SEQ's)				
November Preparation Leave four weeks				
December: Summative Assessment-Written Component + Structured Practical & Viva				

STRUCTURE OF 3RD YEAR

Apart from other subjects in 3rd year (forensic, pharmacology) the structure of the modules taught in pathology will be:

- Lectures-4-5/week
- Lectures are scheduled according to year planner
- Every lecture is of 45 minutes duration.
- Practical-6 days a week
- At the end of every lecture feedback from students would be collected for quality assurance and evaluation.

There will be a total of 130 lectures in third year

- 120 lectures for interactive teaching.
- 4-5 lectures will be utilized for formative written assessment: class tests in form of MCQs and SEQs.
- Collective feedback along with results are provided during lectures after class tests.

Sendups are scheduled at the end of 3rd year, 45 days before final professional.

ASSESSMENT

Formative Assessment

Sr.#	Assessment	Tools	Frequency
1.	Class Tests	20 MCQs 3 SEQs	1 Test after every 2 Modules
2.	Send Ups (Written)	MCQs----- 30 SEQs-----10	After completion of session



DISTRIBUTION OF 3RD MBBS LECTURES ACCORDING MODULES

Modules/Intermodules	Pathology	Pharmacology	Forensic Medicine	Eye	ENT	Surgery	Medicine	Orthopedics	Behavioral Sciences	Miscellaneous
Generalized Module	16	09	07	01	01	02	01	02	---	---
1 st Intermodule	16	13	11	01	02	06	05	03	---	---
Inflammation	10	13	08	02	02	05	03	01	---	Physiology (01) Dermatology (01)
2 nd Intermodule	02	07	10	01	02	04	03	02	---	---
Special Microbiology	53	34	37	08	08	15	19	09	---	Physiology (01) Dermatology (01) Urology (01) DME (01)
Immunity	07	06	02	02	01	03	02	01	---	---
Hemodynamics	07	08	05	01	---	03	02	01	01	01
3 rd Intermodule	---	12	12	---	02	03	03	01	04	04
4 th Intermodule	09	25	---	04	05	03	04	02	---	---
Neoplasia	10	05	---	01	02	02	03	01	01	01
Total	130	132	94	21	25	46	45	23	06	06

ICONS

The following icons have been used to help you identify the various experiences you will be exposed to.



Learning objectives



Assessments



Learning Resources (Tutorials)



Independent learning from the Internet or (Digital Library)



Specific Learning Objectives



LEARNING RESOURCES

RECOMMENDED BOOKS:

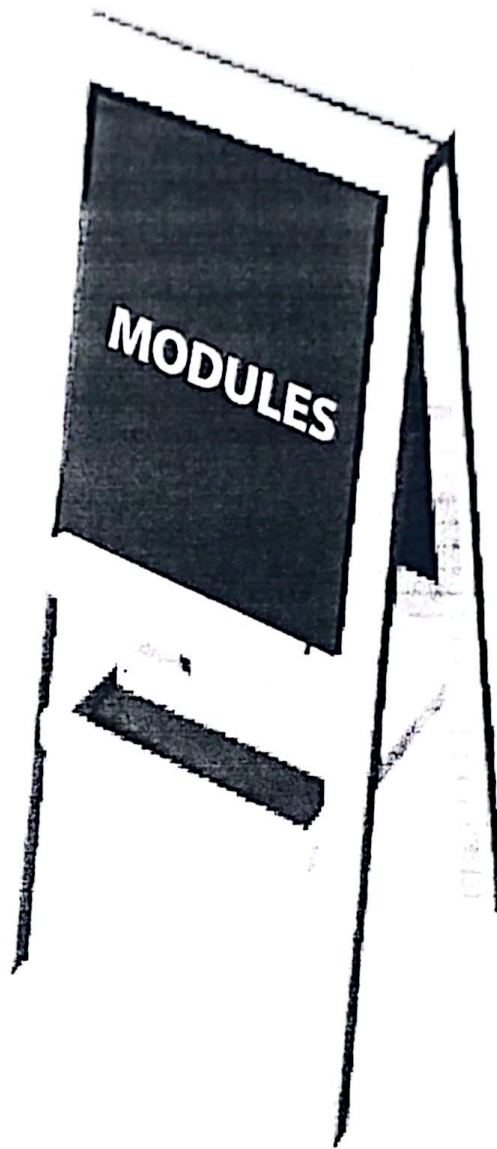
1. Robbins & Cotran Pathologic Basis of Disease (Latest Edition)
2. Monica Cheesbrough District Laboratory Practice in Tropical Countries Part I & II (Latest Edition)
3. Medical Microbiology & Immunology by Ernest Jawetz and Warren E. Levinson (Latest Edition)



Independent learning from the Internet



1. Web and Digital Library of KEMU



Modules Pathology 3rd year

Module No.	TOPICS
01	General Module (General Bacteriology)
02	1 st Intermodule (Cell cycle, Genetics & Cell Injury)
03	Inflammation
04	2 nd Intermodule (Healing & Repair)
05	Special Microbiology (Virology, Parasitology & Mycology)
06	3 rd Intermodule (Psychology/ Bacteriology/ Sciences)
07	Hemodynamics
08	Immunity
09	Neoplasia
10	4 th Intermodule (Diseases of Infancy & Childhood, Diseases of Environment and nutrition)