# WATE MINDICAL COLLEGE

Wah

Medical

College



STUDY GUIDE 4th YEAR MBBS Y4B2

2020-2024



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## **VISION**

National University of Medical Sciences envisions a world with a better quality of life for all by enhancing our contribution to healthcare, education, innovation and research.



## **MISSION**

"To produce competent medical professional graduates equipped with sound knowledge & research capabilities based on scientific principles, imbued with ethics and moral values primed to serve the community through the profession and pursue research & advanced training in any branch of medicine".

## 1. Outcomes of WMC MBBS Program:

At the end of our five-year MBBS program, the graduates should be able to:
1. Independently manage common, non-critical clinical problems.
2. Assist in the management of critically ill patients & demonstrate competency in life saving procedures.
3. Exhibit the attributes of an ethical professional.
4. Conduct research which brings relevance to health care practices.
5. Act as an efficient community health promoter.
6. Exhibit scientific knowledge in all professional activities.
7. Demonstrate clear and efficient written & verbal communication skills.
8. Exhibit the habits of a lifelong learner.

#### 2. Introduction to the Study Guide:

#### I. Objectives of the Study Guide

Dear Students,

We, at the Department of Medical Education, Wah Medical College, have developed this study guide especially for you. This study guide aims to:

- Inform you about the organization of learning programs in this block which will help you to contact the right person in case of any difficulty.
- Help you in organizing and managing your studies throughout the block
- Guide you on assessment methods, rules, and regulations.
- Define the outcomes which are expected to be achieved at the end of the block.
- Identify the learning strategies that will be implemented to achieve the block outcomes such as lectures, small group discussions, clinical skills, demonstration, tutorial, and case-based learning
- Provide a list of learning resources such as books, and journals for students to consult to maximize their learning.

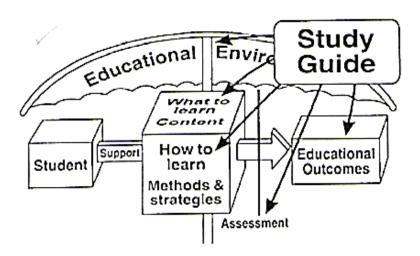


Figure 1. Objectives of the study Guide(HARDEN, J.M. LAIDLAW, E.A. HESKETH, 1999)

## II. Commonly used abbreviations & Logos in the study guide <u>Learning Outcomes:</u>

Learning outcomes are statements that define the expected goal of your course, lesson, or activity in terms of demonstrable skills or knowledge that will be acquired by you as a result of instruction. In simple words, these are the things that you must be able to tell or do with the required attitude after learning a particular topic.

#### 1. Educational Strategies:

These are the methodologies through which you will be taught by your instructors. These can include.

Abbreviation	Logos
LGIS: Large Group interactive	
session/Lecture	
Flipped Classroom	FLIPPED  Classroom activities
CBL: Case based learning.	<b>K</b>
Practicals	
Demonstrations	<b>†</b>
SGD: Small group discussions	
BST: BedSide Teaching	
Skill Lab	
Clinical Teaching (OPD/ OT/ IPD	Ü

#### **Large Group Interactive Sessions**

In a large group, the lecturer introduces a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patient's interviews, exercises, etc. Students are actively involved in the learning process.

#### Flipped classroom

A pedagogical approach in which the conventional notion of classroom-based learning is inverted: students are introduced to the learning material before class with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by teachers.

#### **Small Group Discussion**

This format helps students to clarify concepts, acquired skills or attitudes. Sessions are structured with the help of specific exercises such as patient cases, interviews, or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials, and self-study. The facilitator's role is to ask probing questions, summarize, or rephrase to help clarify concepts.

#### **Case-Based Learning**

This is a small group discussion format where learning is focused around a series of questions based on a clinical scenario. Specifically, designed case scenarios and the learning outcomes to be achieved are shared with the student before the session. Students prepare for the CBL and during class they discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the block. Faculty members are present as a guide and an assessor.

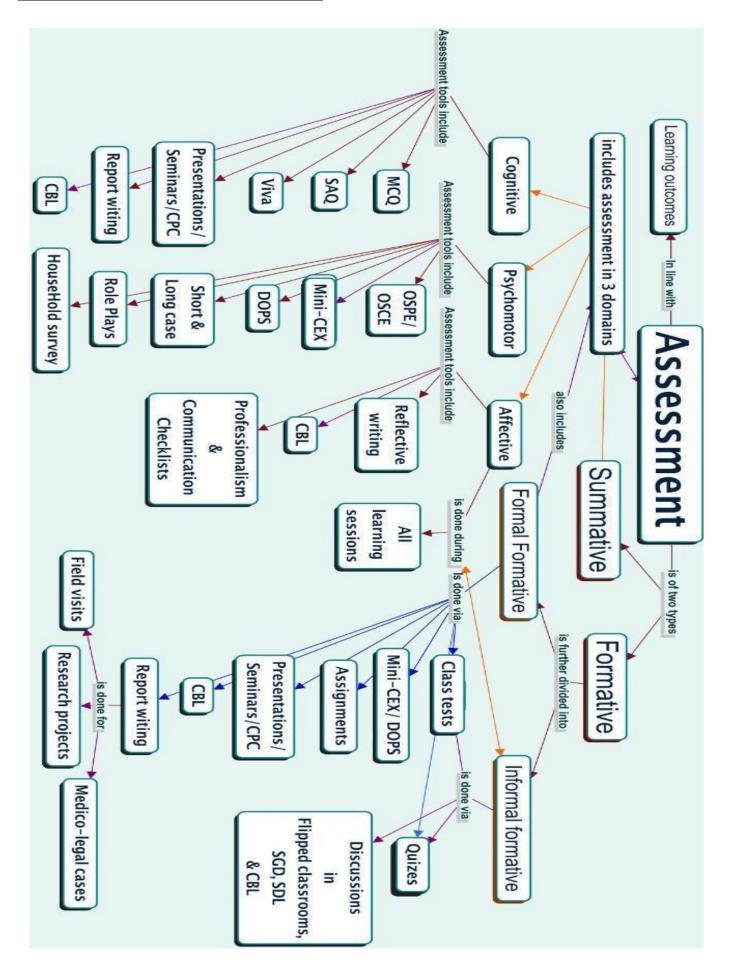
### **Self-Directed Study**

Students assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from the Learning Resource Center, teachers, and resource persons within and outside the college. Students can utilize the time within the college schedule hours for self-study under supervision.

### **Bedside teaching**

Students learn clinical case scenarios/ patient examination firsthand at the patient's bedside with the help of the instructor in case of online teaching, the same cases will be shown to you online with the help of videos and live clinical teaching.

## 3. Assessment Map & Strategies



#### i. Internal Assessment.

During the block the students will be continually formatively assessed. The weightage of internal assessment will be 20 % in final professional MBBS Examination. There will be two EOB and one pre-annual examination. There will also be end of rotation exams at the end of each clinical rotation. The scores of the EOB assessment, clinical rotation assessment and pre-annual examination will be used for calculation of the internal assessment. Students must pass at least 50% of all the formal formative assessments conducted during the year to become eligible to sit in the send-up exam. It is mandatory for MBBS students to appear and pass the pre-annual exam with at least 33% marks in each subject as per PMC rules, failing which student is not eligible to appear in the university exam.

#### ii. Annual Professional Examination.

The University will take the 4<sup>th</sup> professional Examination as per PMC guidelines at the end of the academic year. Annual Theory & Practical Examination will be of 300 marks each in Special Pathology & Community Medicine & 200 marks each in ENT & Ophthalmology. The pass score will be 50% in theory and practical separately. However, in clinical subjects, students should pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately.

#### **Scheme of Assessment:**

#### SPECIAL PATHOLOGY, COMMUNITY MEDICINE

```
Marks of theory paper = 120
```

Time Allowed = 3 hours

Total Marks = 150

MCQs: 40% (150 x 0.4=60 marks)

SEQs: 40% (150 x 0.4= 60 Marks)

IA: 20% (150 x 0.2=30 Marks)

Pass Marks = 75

#### Paper-1:

80 MCQs, Time = 80 min

\*Marks of MCQ components shall be rationalized to 40% weightage out of 150.

\*If a candidate obtains 70 marks in MCQs it will be rationalized as: (70/80\*60=52.50)

#### Paper-2:

9x SEQs: 7 questions x 6 Marks each + 2 questions x 9 Marks each = 60 Marks

Time = 100 min

#### ENT & EYE

Marks of theory paper = 80 marks, Internal Assessment = 20 marks

Time Allowed = 3 hours

Total Marks= MCQs:40% (40 marks) +SEQs:40% (40 marks) +IA:20%(20 marks)

Pass Marks = 50

**Paper-1**: 60 MCQs = 40 marks

Time = 60 min

\*Marks of MCQ components shall be rationalized to 40% weightage. \*If a candidate obtains 50 marks in MCQs it will be rationalized as: (50/60\*40=33.33)

#### Paper-2:

Time = 120 min

8x SEQs = 05 Marks Each = 40 Marks

INTERNAL ASSESSMENT - THE	ORY
INTERNAL ASSESSMENT WEIG	HTING: 20%
Exams	Weightings
Attendance in Lectures:	10%
a. ≥90% = 10%	
b. 80-89% = 7%	
c. 75-79% = 5%	
End of Block/ clinical rotation (theory) Examination	45%
Continuous assessment (average score of all tests attempted after	20%
every learning session during the academic year)	'UN.
Pre-Annual Exam	25%
Total	100%
INTERNAL ASSESSMENT STRUC	CTURE - PRACTICAL
INTERNAL ASSESSMENT W	EIGHTING: 20%
Exams	Weightings
Attendance in Practicals:	10%
a. ≥90% = 10%	
b. 80-89% = 7%	
c. 75-79% = 5%	
*End of Block/ clinical rotation (OSCE) Examination	45%
*Continuous assessment of practical/ clinical skills and attitude	20%
Pre-Annual Exam	25%
Total	100%

## 4. <u>Structured Summary of Y4B2</u>

Name	Y4B2
D. C.	10 1
Duration	10 weeks
Prerequisite Block	Y4B1
Special Pathology	Urinary System, Male genital tract, Female genital tract, Breast, Bone/Joints/Soft tissue, Skin, Vascular disorders of kidney, Glomerular diseases, Tubulointerstitial diseases, Cystic diseases of kidney and obstructive uropathy, Neoplasms of Kidney, Renal function tests and Fluid and electrolyte disorders, Neoplastic and non-Neoplastic disorders of Urinary bladder, Female genital system (Vulva, Vagina and Cervix),Female Genital system (Endometrium, and myometrium),Female Genital system (Fallopian tube and Ovary),Gestational and Placental disorders, Breast (Benign and Malignant Epithelial Lesions), Breast (Stromal neoplasms), Breast (Biochemical markers of importance), Muscular-skeletal system, Skin.
Gynecology	Urinary incontinence, Medical disorders in pregnancy: Renal diseases, Autoimmune diseases (SLE, APS), Epilepsy, Benign and malignant conditions of uterus, cervix and ovary, Endometriosis and chronic pelvic pain
Peads	Common pediatric renal disorders, Acute and chronic kidney injury Chronic cough & recurrent chest infection, Tonsillitis, pharyngitis & peritonsillar abscess.
Surgery	Urology diseases, Surgical diseases & breast pathologies, Orthopedics trauma and pathologies, Anesthesia
Medicine	Common Nephrology, Rheumatology, Dermatology and Psychiatry disorders, Critically ill patients in A&E department
Community Medicine	Demography, Emerging & reemerging infections/ Hospital acquired Infections, General Immunology, Communicable diseases including Parasitology & Entomology, Injuries and accidents, Disaster management, Social and Behavioral sciences, Mental health, Drug Addiction, Smoking, Current Health Programs in Pakistan
ENT	Congenital conditions of nose, Diseases of external nose, Facial trauma, Inflammatory conditions of the nose. Diseases of nasal septum and nasal cavities, Epistaxis, Nasal Allergy, Vasomotor Rhinitis & nasal polypi. Sinusitis, Neoplasm of nose and paranasal sinuses
Ophthalmology (EYE)	Cornea, Lens, Glaucoma, Conjunctiva ,Dry eye and Nasolacrimal system

## 5. Block Development Committee

Chairperson	Brig (R)Prof. Dr. Tario	Masood Malik		
Block In-charge	Prof. Jamila			
Members/ Resource	Community Medicine:	Dr. Robina Mushtaq		
persons	Pathology:	Prof. Jamila		
	ENT:	Col(R)Prof. Muhammad Asad		
	Ophthalmology:	Dr. Asma Aftab		
	Surgery:	Prof. Manan Masood		
	Medicine:	Dr. Syed Asim Ali Shah		
	Gynecology:	Dr. Shabana Kalsoom		
	Pediatrics:	Dr. Tahir Mehmood		
	PCMILE:	Dr. Ambreen Ansar		
Study guide	Department of Medical Education			
developed By	Wah Medical College			
	under Supervision of			
	Prof. Dr. Musarat Ramzan			
Resource person for	Dr. Ambreen Ansar			
Study Guide				

#### 6. Course content

## **Community Medicine**

#### **Subject Learning Outcomes**

After completion of Community Medicine Y4B2 the students would be able to:

- 1. Apply knowledge of statistics to measure all health problems affecting people at individual and community levels, right from birth to death, considering research and ethical approaches. (PLO 2,3,4,6,7,8).
- 2. Recommend measures for prevention, protection and education about the common community health problems. (PLO 1,3,5,6,7,8).

#### **Block Learning Outcomes**

#### At the end of Y4B2 the students will be able to:

- 1. Interpret changes in population and disease patterns for modifying health services. (SLO 1)
- 2. Apply epidemiology of common communicable diseases in the global and local context for control and prevention of diseases. (SLO 1, 2)
- 3. Recommend appropriate interventions for control and prevention of common social health issues at household and community level. (SLO 1, 2)
- 4. Write a comprehensive report on assigned tasks. (SLO 2,4,5)
- 5. Demonstrate professional behavior in all learning activities. (SLO 5)

S#	Topic	Educationa l Strategies	Names of Instructor	Importance (Must Know Should Know Could Know)
1.	Demography	Flipped classroom	Prof Dr. Musarat Ramzan	Must Know

#### **Class Learning Outcomes:**

The students would be able to:

- Associate various factors affecting child bearing practices.
- Interpret population change upon calculation.
- Interpret graphic structures of populations.
- Recommend public health measures on population structure
- Correlate demographic transition with epidemiological transition

2.	Emerging & re-emerging	Flipped	Dr. S. Sabah	Must Know
	infections/ Hospital	classroom	Imran	
	acquired infections/			

#### **Class Learning Outcomes:**

The students would be able to:

- Differentiate between emerging and re-emerging diseases
- Suggest control measures against emerging and re-emerging diseases
- Explain nosocomial infections, factors causing it and control measures.

• Communicate effectively regarding prevention of nosocomial infections

3.	General Immunology	Flipped	Dr. S.	Must
		classroom	Sabah	Know
			Imran	

#### **Class Learning Outcomes:**

The students would be able to:

- Interpret the immune reactions, types of immunity, herd immunity
- Describe pre-requisites of vaccination including cold chain, hazards, contraindications & precautions
- Recommend immunizing agents in various situations.

• Investigate the adverse effect following immunization

General Immunology	Skill	Dr. Khola	Must Know
		Waheed, Dr.	
		Sadia Nadeem	

- Administer polio vaccine following the protocol.
- Advise mothers for vaccination in different situations

4.	Communicable diseases	Flipped	Dr. S. Sabah	Must Know
	including	classroom,	Imran, Dr. Sadia	
	<ul><li>Parasitology &amp;</li></ul>	LGIS,	Nadeem, Dr.	
	Entomology	SGD	Khola Waheed,	
			Dr. Saleh	
			Ahmed, Dr.	
			Hurmat Saeed	

#### **Class Learning Outcomes:**

The students would be able to:

- Compare and contrast the epidemiological determinants, mode of transmission, spectrum, clinical presentations and investigations of communicable diseases.
- Suggest strategies for disease control and prevention for every specific disease and in different scenarios.
- Recommend control measures for the related vectors in the disease scenarios

5.	Social and behavioral	Flipped	Mrs. Hafsa	Should
	sciences	classroom	Naeem	Know

## **Class Learning Outcomes:**

The students would be able to:

• Relate social etiology with individual and public health.

• Discuss the role of interprofessional relationships in a hospital to form a social organization.

• Apply bio-psycho-social model on disease etiology and its prevention.

6.	Mental health	LGIS	Mrs. Hafsa	Must know
			Naeem	

#### **Class Learning Outcomes:**

The students would be able to:

- Recognize warning signs of poor mental health.
- Recommend preventive measures against mental health problems according to the given scenario

• List WHO criteria and Recommendations to improve mental health in countries

7.	Drug Addiction, Smoking	LGIS	Mrs. Hafsa	Must Know
			Naeem	

#### **Class Learning Outcomes:**

The students would be able to:

- Relate factors and hazards associated with drug abuse and smoking
- Differentiate the symptoms of different drug related addictions

• Recommend measures to control drug abuse and smoking in Pakistan.

	Drug Addiction, Smoking	Skill	Mrs. Hafsa	Must Know		
			Naeem			
•	Educate individuals to quit Substance abuse.					
8.	Injuries and accidents	Flipped	Dr. Robina	Must Know		
		classroom	Mushtaq			

#### **Class Learning Outcomes:**

The students would be able to:

- Appreciate epidemiology of accidents
- Give strategies for controlling various types of accidents

0	Disaster management	Flipped	Dr. Robina	Should
9.	Disaster management	Thipped		Siloulu
		classroom	Mushtag	Know

#### **Class Learning Outcomes:**

The students would be able to:

- Categorize different types of disasters
- Outline management plan of Disaster in the given situation
- Apply National Disaster Management and Preparedness guidelines on the given scenarios

10.	<b>Current Health</b>	LGIS &	Dr. Khola	Should
	Programs in Pakistan	Field Visit	Waheed	Know

#### **Class Learning Outcomes:**

The students would be able to:

• Describe various Health programs of Pakistan and their components

•	Participate in various international	l days of significant health problems of
	Pakistan	

11.	Personal Hygiene /Unsafe	LGIS	Dr. Saleh	Should	
	Injections		Ahmed	Know	

#### **Class Learning Outcomes:**

The students would be able to:

Relate personal hygiene and unsafe injection practices with communicable diseases

12.	Personal Hygiene /Unsafe	Skill	Dr. Saleh	Should
	Injections		Ahmed	Know

#### **Class Learning Outcomes:**

- Educate community about importance of personal hygiene and hazards associated with unsafe injection practices
- Demonstrate Hand washing Technique

#### **Field Visits:**

- Family Planning Center
- EPI Center
- MNCH Center

#### **Skills:**

- Hand washing
- EPI
- Communication Skill

#### **CBL**:

- Rash producing Respiratory Infections
- Gastrointestinal Infections

#### **Learning Resources:**

#### 1. Text Books

- Park's Textbook of Preventive and Social Medicine
- Public Health and Community Medicine (Shah, Ilyas, Ansari, Irfan's)

#### 2. Reference Books/ Library resources

- Davidson Principles and Practice of Medicine
- Lucas, Short Textbook of Public Health Medicine for the Tropics
- Population Reference Bureau's Population Handbook
- An Introduction to Medical Demography & Population Studies By Mohd. Aslam Chaudhry & Ali Mohammad Mir
- Handouts/SDL prepared by faculty/Google class

#### 3. Online resources

- Seasonal Awareness & Alert Letter, NIH
- National Health Programmes
- Tobacco free Initiative Pakistan
- Epidemiology of Cigarette smoking
- Communicable diseases in Pakistan-WHO report
- Population Statistics of Pakistan

## **Teaching Faculty:**

Name	Email address
Prof. Dr. Musarat Ramzan	dean@wahmedicalcollege.edu.pk
Prof. Dr. S. Sabah Imran	sabahimran@wahmedicalcollege.edu.pk
Dr. Robina Mushtaq Rizvi	robinamushtaq@wahmedicalcollege.edu.pk
Dr. Khola Waheed Khan	kholawaheed@wahmedicalcollege.edu.pk
Dr. Sadia Nadeem	sadianadeem@wahmedicalcollege.edu.pk
Dr. Saleh Ahmed	s.ahmed.2345@gmail.com

#### **Assessment formats:**

Assessment tools (Formative)	Assessment Strategies (Summative)
MCQs, Home assignments, SAQs/SEQs, CBL, Viva	MCQs, SAQs/SEQs, OSPE, Viva

## **PCMILE**

## **Subject Learning Outcomes**

At the end of fourth year MBBS program the student will be able to:

S.#	Topic/department	Educational	Name of	Importance				
		Strategies	Instructor	(Must Know				
				Should Know				
				Could Know)				
1.	Discuss ethical issues at	LGIS	Medicine	Should know				
	end of life							
Learnii	Learning Outcomes:							
• N	Iake sound decisions regardi	ng resuscitation, med	chanical ventilati	on, artificial				
n	utrition and hydration, termin	nal sedation, withhol	ding and withdra	wing treatments,				
e	uthanasia, and physician-assi	sted suicide.						
2.	Discuss ethical issues at	LGIS	Gynae	Should know				
	the beginning of life.		-					
Learnii	ng Outcomes:							
• Γ	vicewes the othical issues in the	lation to providing a	contragantian ras	anonding to				
	Discuss the ethical issues in re							
	equests for abortions and for		-	ces, providing				
3.	ntenatal care, and caring for Describe ethical issues in	LGIS		Should know				
٥.		LGIS	Surgery	Should know				
Lagunia	organ transplant							
Learini	ng Outcomes:							
• D	iscuss the fundamental mora	ality of transplanting	body parts, the e	thics of organ				
p	rocurement, and the ethics of	f allocation.						
• D	Demonstrate understanding of	thair role as a docto	r in the current s	congric of organ				
	cansplants in Pakistan.	ulen fole as a docto	i ili ule cultelli s	cenario di digan				
4.	From error to harm	LGIS	Physiology	Should know				
		LOIS	Filysiology	Siloulu Kilow				
Learini	ng Outcomes:							
• [	Discuss the reasons causing p	atient harm						
• [	Discuss the burden of harm do	one						
• N	Jame the key strategic action	areas of patient safe	ty as defined by	WHO				
5.	Responding to an	LGIS	BS	Should know				
	Adverse Event:							
	Communication,							
	Apology, and Resolution							
Learnii	ng Outcomes:							
		1' 1 .						
	Differentiate between adverse		miss, minor erro	r, serious error,				
a	and preventable adverse event.							

• Discuss the recommendations for initial response to the event.

• Name important elements of hospital incident policy.

6.	Medical errors	LGIS	BS	Should know				
Learni	ng Outcomes:							
	<ul> <li>Identify the medical errors occurring during surgery, diagnostic workup, medication, or due to faulty devices and equipment, and systems failures, infections, falls, and inappropriate use of healthcare technology</li> </ul>							
7.	Root cause analyses and	LGIS	Pharmacology	Nice to know				
	actions							
Learni	ng Outcomes:							
	dentify any underlying problerror with a non-punitive appr	-		elihood of an				
8.	Apply ethics of medical	Flipped	DME	Must Know				
	writing in their research	classroom						
	project							
• [	Discuss the pros & cons of fol	lowing ethics in med	lical research wr	iting.				
• V	Vrite an introduction of 300-5	500 words on the giv	en research topic	es following the				
e	ethics of medical writing.							
9.	Pursuing professional	LGIS	BS	Must Know				
	Accountability and a just							
	culture.							
Learni	ng Outcomes:							

- Discuss the meaning and the key components of accountability.
- Discuss the place of accountability in professionalism.
- Explain why accountability is needed in the medical profession.

## **Online Learning resources:**

- Responding to adverse events
- Patient safety to avoid harm by WHO
- Medical error
- RCA
- Ethics in medical writing
- Accountability in healthcare

## **Pathology**

At the end of second module, the students of 4th year MBBS should be able to:

- Describe the etiology, clinical features, pathogenesis, laboratory findings, morphological features and clinic-pathologic consequences of major diseases related to the Urinary System, Male & Female genital tract, Breast, Bone /Joints/Soft tissue and skin.
- Describe the clinical features, pathogenesis, laboratory findings, morphological features and clinico-pathologic consequences of major diseases related to Kidney, Collecting system, Female genital system and Breast.

S. No	Topics	Educational Strategies	Name of Instructor	Importance (Must Know Should Know Nice to Know)
1.	Urinary System.	LGIS/ Practical**	Asstt. Prof. Dr. Fozia Noreen **Asstt Prof. Dr. Lubna Ehtizaz	Should Know

#### **Class Learning Outcomes:**

- Congenital & developmental anomalies of kidney/ vascular disorders.
- Etiology & Pathogenesis of glomerular diseases.
- Tubulointerstitial diseases.
- Obstructive uropathy & Urolithiasis Cystic diseases of the kidney.
- Neoplasms of kidney (1)
- Neoplasms of kidney (2)
- Congenital anomalies / Neoplastic Disorders of ureter & urinary bladder.
- Proteinuria / Nephrotic syndrome.
- \*\*Renal function tests /Fluid & electrolyte disorders.

2.	Male genital tract.	LGIS	Prof Brig(R)	Nice to Know
			Tariq Masood	
			Malik	

#### **Class Learning Outcomes:**

- Congenital anomalies of Penis & Testis.
- Tumors of Testis.
- Inflammatory disorders of Prostate Hyperplasia & carcinoma Prostate/ PSA

3.	Female genital tract.	LGIS & Practical	Asstt. Prof. Dr. Fozia Noreen	Nice to Know	
Clas	Class Learning Outcomes:				
	<ul> <li>Female genital system pa and pap smear.</li> </ul>	thology (vulva, v	vagina, cervix) Cerv	vical tumors	
	• Endometrium & Myomet	rium (Endometri	al tumors & Hyper	plasia)	
	• Fallopian tubes /Ovaries/	Ovarian tumors.			
	<ul> <li>Gestational and Placental</li> </ul>	disorders.			
	<ul> <li>Infertility</li> </ul>				
4.	Breast	LGIS &	Asstt. Prof. Dr.	Should Know	
~=		Practical	Fozia Noreen		
Clas	s Learning Outcomes:				
	• Benign Epithelial lesions/	Stromal tumors.			
	Breast carcinomas/ Stroma	l tumors.			
	Biochemical markers: impo	ortance in diagno	sis of breast cancer	rs.	
5.	Bone /Joints/ Soft tissue.	LGIS	Prof Brig(R) Tariq Masood ** Asstt Prof. Dr. Lubna	Could Know	
			Ehtizaz		

## Class Learning Outcomes:

- Bone structure/ Growth.
- Congenital & Acquired disorders of bone & cartilage.
- Defects in metabolic pathway of bone development.
- Bone Fractures, Osteonecrosis and Osteomyelitis.
- Bone Tumors & Tumors like lesions.
- Joints/ Osteoarthritis/ Rheumatoid Arthritis.
- Soft tissue, Tumors of Adipose tissue & Fibrous tissue.
- Smooth & Skeletal muscle tumors/ Tumors of uncertain origin
- \*\*Uric Acid and Gout.

6.	Skin.	LGIS	Asstt Prof. Dr.	Should Know
			syed. Sarwar	
			Ali	

### **Class Learning Outcomes:**

• Pathology of Skin (Disorders of pigmentation & Melanocytes, chronic inflammatory dermatosis, Blistering diseases), Disorders of epidermal appendages.

• Benign epithelial tumors/ Tumors of Dermis/ Pre-malignant & Malignant epidermal tumors/ Melanoma

7.	Vascular Disorders of	LGIS	Asstt. Prof. Dr.	<b>Should Know</b>
	Kidneys		Fozia Noreen	

#### **Class Learning Outcomes:**

- Define nephrosclerosis and describe the morphological findings.
- Differentiate between benign Nephrosclerosis and malignant hypertension, clinically and morphologically.
- Identify hyperplastic arteriosclerosis.
- Enlist thrombotic microangiopathies and describe etiological factors and clinical features.

8.	Glomerular diseases.	LGIS	Asstt. Prof. Dr.	Should Know
			Fozia Noreen	

#### **Learning Outcomes:**

- Identify the basic difference between Nephrotic syndrome and Nephritic syndrome.
- Enlist primary and secondary glomerular diseases separately.
- Enlist the pathogenetic mechanisms related to kidney disease and injury with respect to glomerular diseases.
- Describe the clinical manifestations, light microscopy, immunofluorescence and electron microscopy findings of major glomerular diseases.

9.	Tubulointerstitial	LGIS &	Asstt. Prof. Dr.	Should Know
	diseases	Practical	Fozia Noreen	

#### **Learning Outcomes:**

- Enumerate the causes, clinical features, pathogenesis and morphological findings of Acute pyelonephritis.
- Describe the main finding in Chronic Reflux associated pyelonephritis.
- Describe the pathogenesis, clinical features and Morphology in cases Of Tubulointerstitial nephritis.
- Define acute tubular injury and necrosis and describe its pathogenesis, clinical findings and morphological features.
- Identify histopathological findings of above condition on the given slides.

10.	Cystic diseases of kidney	LGIS	Asstt. Prof. Dr.	<b>Should Know</b>
	and obstructive uropathy		Fozia Noreen	

- Enlist the cystic diseases of the kidney.
- Describe the pathogenesis, morphological findings and genetic changes in Autosomal Dominant and Autosomal recessive kidney disease.

- Enlist medullary disease with cysts and identify gene Loci in Nephronophthisismedullary cystic disease complex.
- Identify the causes of renal stone formation.
- Define hydronephrosis, enlist its most common causes and describe morphology and clinical features.

11. Neoplasms of Kidney.	LGIS	Asstt. Prof. Dr.	<b>Should Know</b>
		Fozia Noreen	

- Enlist different benign and Malignant renal neoplasms.
- Describe the general clinical Manifestations and Gross morphological findings of renal neoplasms.
- Know the specifics about Angiomyolipoma, Oncocytoma, Clear cell renal cell carcinoma, Papillary renal cell carcinoma and Chromophobe renal cell carcinoma in terms of morphology.
- Describe the morphological findings in Wilms tumor and know the age group affected.

12.	Renal function tests and	LGIS	Asstt Prof. Dr.	Should Know
	Fluid and electrolyte		Lubna Ehtizaz	
	disorders.			

#### **Learning Outcomes:**

- Enlist commonly requested renal Function tests.
- Identify the causes related to deranged Renal function tests and their interpretation.

13.	Neoplastic and non-	LGIS	Asstt.	Should Know
	Neoplastic disorders of		Prof. Dr. Fozia	
	Urinary bladder.		Noreen	

#### **Learning Outcomes:**

- Enlist non-neoplastic conditions affecting The Urinary bladder.
- Describe the pathogenesis of Neoplasms of Urinary bladder.
- Describe the morphological Findings of different Urinary bladder neoplasms.

14.	Female genital System	LGIS	Asstt. Prof. Dr.	Should Know
	(Vulva, Vagina and		Fozia Noreen	
	Cervix).			

- Enlist the common non-neoplastic epithelial disorders of Vulva and describe the histological differences.
- Describe the morphological Findings of Condylomas and Extramammary Paget's disease of Vulva.
- Identify the causes of vaginitis.

- Describe the etiology/ Pathogenesis of Cervical neoplasia.
- Classify the precursor lesions of Cervical Squamous cell carcinoma.
- Describe the gross and microscopic findings of Invasive carcinomas of cervix.

15.	Female Genital system	LGIS	Asstt. Prof. Dr.	Should Know
	(Endometrium, and		Fozia Noreen	
	myometrium).			

- Define endometritis, adenomyosis and endometriosis.
- Enlist the theories related to proposed Origins of Endometriosis and describe the clinical and morphological findings.
- Enlist the causes of abnormal uterine Bleeding by age group.
- Classify Endometrial hyperplasia and Describe the morphological findings.
- Describe the clinical features, Pathogenesis and Clinical findings of Endometrial carcinomas.
- Identify findings related to Endometrial polyps.
- Describe the clinical manifestations and Morphological findings of Leiomyomas.

16.	Female Genital system	LGIS	Asstt. Prof. Dr.	Should Know
	(Fallopian tube and		Fozia Noreen	
	Ovary).			

#### **Learning Outcomes:**

- Enlist the common causes of Salpingitis and Pelvic Inflammatory disease.
- Classify ovarian tumors according to Their sites of origin/WHO classification and tabulate the differences between type I and type II tumors.
- Describe the gross and histological findings of Surface Epithelial tumors, Germ cell tumors and Sex-cord stromal tumors.

17.	<b>Gestational and Placental</b>	LGIS	Asstt. Prof. Dr.	Should Know
	disorders.		Fozia Noreen	

- Define ectopic pregnancy and enlist the common sites of development.
- Enumerate the differences between Complete mole and Partial mole with particular focus on karyotype, morphology, serum hcG levels and subsequent carcinoma risk.
- Define invasive mole.
- Enlist common non- molar malignancies and describe common morphological findings.
- Define Preeclampsia/ Eclampsia and Describe clinical findings.

18.	Breast (Benign and	LGIS	Asstt. Prof. Dr.	Should Know
	Malignant Epithelial		Fozia Noreen	
	Lesions).			

- Enlist benign epithelial lesions and Understand their significance with respect to risk of subsequent carcinoma.
- Describe the morphology of proliferative lesions without and with atypia.
- Describe the clinical and mammographic features & Enlist the Risk factors associated with development of invasive carcinoma.
- Describe the morphology of in- Situ lesions, their types and enumerate differences between Ductal carcinoma in- situ and Lobular carcinoma in-situ.
- Describe the morphological findings of Invasive Ductal and Invasive Lobular carcinomas.
- Enlist the biological types of Invasive Carcinomas and tabulate differences amongst them.
- Enlist the factors that influence the outcome of invasive cancers with detailed focus on Biologic type and Tumor stage.

• Enlist the targeted therapies available for treatment of breast cancer.

19. B	Breast (Stromal neoplasms).	LGIS	Asstt. Prof. Dr.	Should Know
			Fozia Noreen	

#### **Learning Outcomes:**

- Enlist benign and malignant stromal Neoplasms of breast.
- Describe the clinical features and morphological findings of Fibroadenoma.

• Describe the morphological Findings of Phyllodes tumor.

20.	Breast (Biochemical	LGIS	Asstt. Prof. Dr.	Should Know
	markers of importance).		Fozia Noreen	

#### **Learning Outcomes:**

• Explain the importance of Detection of Estrogen receptor, Progesterone receptor, Her 2 Neu and Proliferative index on invasive cancer specimens.

21.	Musculo- skeletal system:	LGIS	Prof Brig	Should Know
			(R)Tariq	
			Masood	
			Malik	

- Identify the normal bone histology. Differentiate Between woven and lamellar bone.
- Enumerate the factors controlling bone development and differentiate between endochondral and intramembranous ossification.
- Define and describe bone remodeling.

- Define dysostosis and dysplasia.
- Define and describe osteogenesis imperfecta.
- What is osteopenia? Describe the pathogenesis and morphology of osteoporosis.
- Describe the pathogenesis and morphology of Paget's disease.
- Enumerate the types of bone fractures. Describe osteonecrosis.
- Describe the etiological factors, pathogenesis and morphology of acute and chronic osteomyelitis.
- Classify bone tumors. Describe the pathogenesis, morphology and clinical features of osteosarcoma
- Describe the clinical and morphological features of osteochondroma.
- Describe the pathogenesis and morphological features of chondrosarcoma.
- Describe the clinical and morphological Features of Ewing's sarcoma and Giant cell tumor.
- Define and describe aneurysmal bone Cyst and fibrous dysplasia.
- Describe the etiology, Pathogenesis and morphology of osteoarthritis.
- Describe the etiology, pathogenesis and morphology of Rheumatoid arthritis.
- Define and describe suppurative arthritis.
- Classify soft tissue tumors. Describe morphological features of lipoma and liposarcoma.
- Describe clinical and morphological features of leiomyoma and leiomyosarcoma. Describe the morphological features of rhabdomyosarcoma.
- Enumerate tumors of uncertain origin. Describe morphological features of synovial sarcoma.
- Describe the etiology, pathogenesis, clinical features and morphology of gout.
- Enumerate tumors of uncertain origin. Describe morphological features of synovial sarcoma.

• Describe the etiology, pathogenesis, clinical features and morphology of gout

22.	Skin	LGIS	Asset Prof	Should Know
			Dr Syed	
			Sarwer Ali	

- Explain the disorders of pigmentation Along with chronic inflammatory dermatosis, various blistering diseases and disorders of epidermal appendages.
- Describe the various benign, premalignant and malignant, Epidermal and dermal tumors including melanoma.

## **References**:

- Robbins Basic Pathology,10<sup>th</sup> ed. & Robbins and Cotran
- Pathologic Basis of Disease,9<sup>th</sup>Edition.

## **Practical**

## **Learning Outcomes:**

At the end of second block, the students of 4th year MBBS should be able to: Establish diagnosis of given topics of Kidney and collecting system, Female Genital system and Breast by correlating findings in given slides with gross morphology.

S. No	Special Pathology Learning Objectives	Educational Strategies	Name of Instructor	Importance (Must Know Should Know Could Know)
1	• Elucidate microscopic features of Chronic Pyelonephritis and convey the information to patients/attendants in simple words.	Demonstra tion / Practical	ALL Lecturers	Should Know
	<ul> <li>Counsel the patient for dietary modification in prevention of stone formation &amp; chart out the prevention of renal stones</li> </ul>			
2	<ul> <li>Interpret and explain reports to patient/attendant based on the markedly deranged Renal function tests.</li> </ul>	Demonstra tion / Practical		Should Know
3	• Explicate the histological features Of Wilms tumor with particular focus on the triphasic pattern.	Demonstratio n / Practical		Should Know
4	<ul> <li>Elucidate the histological findings of clear cell renal cell carcinoma. Counsel the patient for Radical Nephrectomy. (PM)</li> </ul>	Demonstratio n /Practical		Should Know
5	Elucidate the histological features of Transitional cell carcinoma bladder.	Demonstratio n/ Practical		Should Know
6	Elucidate the histological findings of Leiomyoma uterus	Demonstratio n /Practical		Should Know

	and explain the information to patients/attendants in simple		
7	<ul> <li>Elucidate the histological findings of Serous and mucinous Cystadenomas of ovary.</li> </ul>	Demonstratio n /Practical	Should Know
8	<ul> <li>Elucidate the histological findings Of Endometrial and cervical carcinomas.</li> </ul>	Demonstratio n /Practical	Should Know
9	<ul> <li>Elucidate the histological findings of Mature cystic teratoma, other malignant Ovarian tumors and Endometriosis.</li> </ul>	Demonstratio n /Practical	Should Know
10	<ul> <li>Elucidate the histological findings of Fibroadenoma of Breast.</li> </ul>	Demonstratio n /Practical	Should Know
11	<ul> <li>Elucidate the histological findings of Invasive Ductal Carcinoma of breast. Explain the significance of ER, PR &amp; HER 2 in Breast neoplasms for detecting cancer.</li> </ul>	Demonstratio n /Practical	Should Know
12	<ul> <li>Elucidate the histological findings of Fibrocystic changes in breast.</li> </ul>	Demonstratio n /Practical	Should Know

1. **References**: Robbins Atlas of Pathology 3rd edition & Robbins Basic Pathology 10th edition.

## **Learning Resources:**

#### 1. Reference Books

- i. Robbins Basic Pathology, 10th edition
- ii. Cotran Pathologic Basis of Disease, 9th Edition

#### **Assessment formats**

Assessment tools (Formative)	Assessment Strategies (Summative)
MCQs, Home assignments, SAQs	MCQs, SEQs, OSPE, Viva

#### ENT

#### **Learning Outcomes:**

- Diagnose & manage common diseases of the, nose & paranasal sinuses(PLO1,3,6,7,8)
- Correlate the clinical features with the underlying pathology involved mechanisms; (PLO1,3,6,7,8)
- Correlate the clinical features with the pathophysiological process and use it to order appropriate investigations and reach correct diagnosis. (SLO1, 3, 5, 6).
- Devise a management plan for common nose & paranasal sinuses diseases. (SLO1, 3, 5, 6).
- Discuss recent advances pertaining to surgery in nose & paranasal diseases (PLO 6, 8).

S. No	Торіс	Educational Strategies	Name of instructor	Importance (Must Know Should Know Could Know)
1.	Congenital conditions of nose	LGIS	Prof M. Asad Chughtai	Should know

#### **Learning Outcomes:**

- Discuss the importance of congenital conditions of the nose.
- Diagnose common congenital malformations of the nose and their managements.

2.	Diseases of external nose	LGIS	Prof M.	Should
			Asad	know
			Chughtai	

#### **Learning Outcomes:**

- Recognize various external deformities like saddle, hump and crooked nose and their managements
- Describe furunculosis, vestibulitis, cellulitis, neoplasm's, cavernous sinus thrombosis and their management.

3.	Facial trauma	LGIS	Prof M.	Should
			Asad	know
			Chughtai	

#### **Learning Outcomes:**

- Explain the aetiology of facial trauma, classification and management principles in facial trauma.
- Explain the role of imaging in facial trauma and its significance.

4.	Inflammatory conditions of the	LGIS	SR Dr	Should
	nose.		Anum Ajmal	know

#### **Learning Outcomes:**

• Define rhinitis

- Recall its Classification,
- Make differential diagnosis of inflammatory conditions,
- Order appropriate investigations & interpret the results.

Make a management plan.

5.	<ul> <li>Diseases of nasal septum</li> </ul>	LGIS	SR Dr	Should
	• Diseases of flasar septum		Anum Ajmal	know
	and nasal cavities		Allulli Ajillai	know

#### **Learning Outcomes:**

- Identify various septal diseases
- Anticipate complications of nasal septal surgery; prevention and their management.

• Discuss foreign bodies, rhinolith and maggots along with their management.

6.	Epistaxis	LGIS	Prof M.	Should
			Asad	know
			Chughtai	

#### **Learning Outcomes:**

- Explain nasal vascularity.
- Enlist various causes of epistaxis.
- Classify epistaxis
- Correlate presentation with sites of bleeding a,

• Suggest emergency and definitive management based on the underlying pathology.

7.	Nasal Allergy	LGIS	SR Dr	Should
			Anum Ajmal	know

#### **Learning Outcomes:**

- Define nasal allergy;
- Explain pathophysiology of various types of allergies
- Identify nasal allergy based on clinical presentation.
- Make a list of differential diagnosis (D.D).

• Order appropriate investigation and make a management plan.

8.	Vasomotor Rhinitis & nasal	LGIS	Prof M.Asad	Should
	polypi.		Chughtai	know

- Discuss nasal functions and effects of autonomic imbalance in nasal physiology.
- Identify presentation of a patient in vasomotor rhinitis and nasal polypi.
- Generate Differential diagnosis.
- Perform clinical examination
- Outline management plan
- Counsel the patient of vasomotor rhinitis & nasal polyp.

9.	Sinusitis	LGIS	Prof M.Asad	Should
			Chughtai	know

- Recall paranasal sinus anatomy and function.
- Classify sinusitis.
- Explain pathophysiology of sinus infection.
- Explain clinical features, detailed investigations and management.
- Anticipate complications, perform timely investigations (CT and MRI), Decide conservative and surgical management plans

• Identify fungal sinusitis, discuss its significance, anticipate complications associated with it and chalk out an early management plan.

10.	Neoplasm of nose and paranasal	LGIS	Prof M.	Should
	sinuses.		Asad	know
			Chughtai	

#### **Learning Outcomes:**

- Diagnose a case of neoplasm of the nose and PNS.
- Describe types, clinical features /presentation and managements of different neoplasm's of nose & PNS

#### **Learning Resources:**

#### **Text books:**

Reference Books

- a. Ballenger's Otorhinolaryngology, Head & Neck Surgery 17th edition.
- b. Scott Brown's Otorhinolaryngology 8th edition.

#### **Reference Books:**

- 1. Diseases of Ear, Nose, and Throat Head and Neck Surgery by PL Dhingra. Shruti Dhingra 8th Edition.
- 2. Logan Turner's Diseases of the Nose Throat and Ear Head and Neck Surgery by S. Musheer Hussain 11th Edition.
- 3. Essentials of ENT Examination by JT Shah

#### **Assessment formats:**

Assessment tools (Formative)	Assessment Strategies (Summative)
MCQs, Home assignments, SAQs	MCQs, SEQs, OSPE, Viva

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## **Ophthalmology**

## **Subject Learning Outcomes**

The department of ophthalmology aims to equip medical students with essential knowledge, skills and attitude which will enable them to:

- 1. Provide primary eye care for various ophthalmic diseases including emergencies and if required, refer the patients to appropriate centers (PLO 1,6)
- 2. Perform various ophthalmic examination methods essential for all Practitioners (PLO 1,2,6)
- 3. Communicate effectively with the patient, family and community regarding eye diseases and their related issues (PLO 1,2,6)
- **4.** Perform essential minor surgical procedures (PLO1,2)
- 5. Apply principles of medical ethics pertaining to Ophthalmology (PLO 3)
- **6.** Provide awareness regarding prevention of common public ophthalmic health problems (PLO 5)

## **Block Learning Outcomes**

After completion of Ophthalmology course content for 2<sup>nd</sup> block, the students would be able to:

- Identify different corneal diseases and summarize principles of corneal disease management. (SLO: 1,2,5,6)
- Classify and explain indications for different types of keratoplasty.

(SLO: 1,2,5,6)

- Diagnose conditions like Pterygium, Pinguecula, Conjunctivitis, episcleritis and scleritis and their systemic associations when present. (SLO: 1,3,5,6)
- Recognize and manage inflammation of the Uveal tract. (SLO: 1,2,3,5,6)
- Identify cataract and lens related pathologies. (SLO: 1,2,5,6)
- Justify different treatment options for cataract. (SLO: 1,2,3,5,6)
- Diagnose Dry eyes and diseases of Nasolacrimal System based upon their clinical assessment and make a referral to an ophthalmologist. (SLO 1,2,3,6)

Sr#	Topic	Educational Strategies	Names of Instructor	Importance (Must Know Should Know Could Know)			
1.	Corneal diseases I	LGIS	Dr. Marrium Shafi	Must know			
Lea	Learning Outcomes:						

Co-relate the anatomical and physiological aspects of cornea with its different clinical presentations.

- Differentiate between various corneal ulcers based upon its etiology.
- Rationalize different treatment strategies and visual rehabilitation options in patients of corneal ulcers.

2. Corneal Diseases II LGIS Dr. Marrium Shafi Should know

#### **Learning Outcomes:**

- Diagnose keratoconus based upon their clinical features.
- Outline management plan for keratoconus.
- Classify keratoplasty.

• Rationalize the indications of different types of keratoplasty.

<b>3.</b>	Conjunctiva I	Flipped class	Dr. Asma Aftab	Must Know
		room		

#### **Learning outcomes:**

- Correlate the anatomical and pathophysiological aspects with clinical presentation of conjunctival diseases.
- Classify conjunctival diseases.
- Differentiate between bacterial, viral, allergic and chlamydial conjunctivitis and enumerate their treatment options.

4.	Conjunctival diseases	Flipped class	Dr. Asma Aftab	Must Know
	Episclera & Sclera	room		

#### **Learning outcomes:**

- Recognize the conditions like Pterygium, Pinguecula, Ophthalmia neonatorum and suggest their management.
- Differentiate between the clinical features of Episcleritis and Scleritis.
- Outline management plan for Episcleritis and Scleritis.

• Recognize their systemic associations.

5.	<b>Uveal Tract</b>	LGIS	Maj.Dr. Haroon	Should Know
			Sarfaraz	

#### **Learning Outcomes:**

- Explain the anatomy of the uveal tract.
- Describe basic physiological aspects.
- Name the congenital defects of uveal tract

6.	Uveitis	LGIS	Maj.Dr. Haroon	Could Know
			Sarfaraz	

- Classify uveitis.
- Identify clinical features of uveitis.
- Order appropriate investigations and treat a case of uveitis.

•	Recognize certain special types of uveitis e.g. Fuch's uveitis, sympa	athetic
	ophthalmia	

7.	Introduction to lens	LGIS	Dr. Yaseen Lodhi	Must Know
	and Ectopia lentis			

- Explain basic anatomy and physiology of lenses.
- Identify ectopia lentis and its associations.

8.	Lens II	LGIS	Dr. Yaseen Lodhi	Must know
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#### **Learning Outcomes:**

- Recognize different clinical presentations of cataract.
- Explain different examination techniques to detect cataract.

9.		Lens III	LGIS	Dr. Yaseen Lodhi	Must Know
_	_	_			

#### **Learning Outcomes:**

- Justify different treatment options of cataract.
- Anticipate major complications of cataract surgery.

10.	Nasolacrimal system &	LGIS	Maj. Dr. Haroon	Must Know
	Dry Eye		Sarfraz	

#### **Learning outcomes:**

- Explain the anatomy and pathophysiological aspects of nasolacrimal system.
- Recognize clinical presentations of different lacrimal disorders.
- Outline management strategies for nasolacrimal disorders.
- Classify dry eye according to pathogenesis.
- Outline management plan for dry eyes.

## **Learning Resources:**

## 1. Text books:

- Clinical Ophthalmology, Jatoi S M
- ➤ Basic Ophthalmology, Jogi R

## 2. Reference Books:

- General Ophthalmology, Vaughan and Asbury
- > Kanski's Clinical Ophthalmology A Systematic approach, Bowling

## 3. Online resources:

- ➤ https://www.medscape.com/ophthalmology
- ➤ Ophthalmology Google classroom 2023

## 4. Library resources:

- ➤ Basic Ophthalmology, Jogi R
- ➤ General Ophthalmology, Vaughan and Asbury
- ➤ Clinical Ophthalmology, Jatoi S M
- ➤ Parson's Diseases of the eye, Sihota R
- ➤ Kanski's Clinical Ophthalmology A Systematic approach, Bowling

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#### **Assessment formats:**

Assessment Strategies (Formative)	Assessment Strategies (Summative)
MCQ's, Quiz, Class discussion, Quiz using Google forms	MCQ's, SAQ's, Viva

#### **Medicine**

#### **Block Learning Outcomes:**

By the end of this block students should know:

- Identify Clinical features, Correlate pathophysiology, Diagnose, investigate and plan management of common Nephrology, Rheumatology, Dermatology and Psychiatry disorders (SLO1,3, 5,6).
- Recognize complications & advise preventive measures and discuss prognosis of these disorders (SLO1, 2,4, 5).
- Diagnose, investigate and plan management of critically ill patients in A&E department (SLO 1, 3, 4, 5).

S.#	Topic	Educational Strategies		Importance (Must Know Should Know Could Know)
		Nephrology		
1.	Acute Kidney Injury and its management	LGIS	Dr. Khalil Ur Rehman	MUST KNOW

#### **Learning Outcomes:**

- Diagnose the patient on the basis of history and examination
- Determine the cause of AKI
- List common nephrotoxic medications
- Differentiate between prerenal and renal causes of AKI
- Advise relevant investigations
- Devise management plan
- Propose preventive measures
- Treat complications of AKI

2.	UTI and Pyelonephritis	LGIS	Dr. Khalil Ur	MUST KNOW
			Rehman	

- Diagnose the patient on the basis of history and examination
- Differentiate lower urinary tract infection from Pyelonephritis
- List causes of Sterile pyuria
- Advise relevant investigations
- Devise management plan
- Choose appropriate antibiotic and duration of its use

•	Propose preventive measures for	·IITI			
3.	Cystic Diseases of the Kidney	LGIS	Dr. Khalil Ur Rehman	Should Know	
Learn	ing Outcomes:				
•	Diagnose the patient on the basis	s of history and ex	amination		
•	List different cystic diseases of the	he kidney			
•	Diagnose Autosomal dominant p	oolycystic kidney o	disease (ADPKD	)	
•	Manage complications of ADPK	D			
•	Advise relevant investigations				
•	Devise management plan				
•	Counsel the patient				
•	Advise family screening if neede	ed			
4.	Fluid and Electrolyte balance: Potassium Disorders	LGIS	Dr. Khalil Ur Rehman	Should Know	
Learn	ing Outcomes:				
•	Approach to patient with hypoka	alemia and hyperka	alemia		
•	Determine the cause on the basis	of integrated clin	ical findings		
•	List common drugs causing pota	ssium disturbance	S		
•	Advise relevant investigations				
•	Devise management plan				
5.	Tubulointerstitial Diseases	LGIS	Dr. Khalil Ur Rehman	SHOULD KNOW	
Learn	ing Outcomes:		Reiiiiaii	KNOW	
	Diagnose the patient on the basis	s of history and ex	amination		
	Differentiate tubular disorders fr	_			
	Determine the cause	C			
•	List nephrotoxic medications				
	Advise relevant investigations				
<ul> <li>Devise management plan</li> </ul>					
6.	Nephrotic Syndrome – Clinical Presentation, Differential Diagnosis and Management	LGIS	Dr. Khalil Ur Rehman	MUST KNOW	
Learn	ing Outcomes:				
Diagnose the patient on the basis of history and examination					

- Differentiate nephrotic from nephritic syndrome
- Determine the cause of nephrotic syndrome
- Advise relevant investigations
- Devise management plan

7.	Metabolic Acidosis: Renal	LGIS	Dr. Khalil Ur	MUST KNOW
	Tubular Acidosis.		Rehman	

#### **Learning Outcomes:**

- Appropriately approach to a patient with metabolic acidosis
- Differentiate between high anion gap and normal anion gap metabolic acidosis
- Identify different types of renal tubular acidosis
- List causes of renal tubular acidosis
- Advise relevant investigations
- Devise management plan

8.	Nephritic Syndrome -	LGIS	Dr. Khalil Ur	MUST KNOW
	Clinical Presentation,		Rehman	
	Differential Diagnosis and			
	Management)			

#### **Learning Outcomes:**

- Diagnose the patient on the basis of history and examination
- Differentiate nephrotic from nephritic syndrome
- Determine the cause of Nephritic syndrome
- Advise relevant investigations
- Devise management plan

9.	Chronic Kidney Disease	LGIS	Dr. Khalil Ur	Must Know
	and Management		Rehman	

- Diagnose the patient on the basis of history and examination
- Determine the cause of CKD
- Learn staging of CKD
- List common nephrotoxic medications
- Advise relevant investigations
- Devise management plan
- Propose preventive measures
- Treat complications of CKD
- Counsel the patient with renal failure

10. Renal re	_	LGIS	Dr. Khalil Ur	Should Know
Transpla	Dialysis and Renal		Rehman	
Learning Outc				
<ul> <li>List indica</li> </ul>	tions for dialysis and t	transplant		
• Differentia	nte between different t	ypes of dialysis		
• Enumerate	e steps of dialysis and	its preparation		
Manage co	ommon complications	during dialysis		
Enumerate	pre-requisites of rena	l transplant		
	m Metabolism and	LGIS	Dr. Khalil Ur	Should Know
Parati proble	nyroid related		Rehman	
Learning Outco				
<ul><li>Diagnose t</li></ul>	the patient on the basis	s of history and ex	amination	
<ul> <li>Determine</li> </ul>	the cause			
Advise rel	evant investigations			
<ul><li>Devise ma</li></ul>	nagement plan			
		Endocrinology		
	ng's Syndrome and on's Disease	LGIS	Prof. Sohail Iqbal Bhutta	Should Know
Learning Outco			1	
<ul><li>Justify abr</li></ul>	normalities in the horm	nones produced by	the adrenal glan	ds and their
_	esulting in Cushing S	_		
Propose m	anagement of Cushing	g Syndrome after e	establishing clinic	cal diagnosis.
	yroidism and	LGIS	Dr. Rifat	Should Know
Endemic Goiter Yasmin				
Learning Outcomes:				
<ul> <li>Correlate pathophysiological basis of various etiological factors to clinical manifestations of hypothyroidism. Parathyroid disorders.</li> </ul>				
Classify hypothyroidism.				
<ul> <li>Interpret investigations for diagnosis including thyroid function tests.</li> </ul>				
Outline management including drug therapy and regular follow up				
14. Hyperth	yroidism	LGIS	Dr. Rifat Yasmin	Should Know
Learning Outco	mes:		I WOIIIII	

- Correlate pathophysiological basis of various etiological factors to clinical manifestations of hyperthyroidism
- Devise plan for diagnosis, drug therapy, radioactive iodine and surgical management of hyperthyroidism

15.	Introduction to Diabetes	LGIS	Prof. Muzamil Jamil	Should Know	
Learn	ing Outcomes:				
<ul> <li>Differentiate between type 1 and type 2 diabetes on the basis of pathophysiology, etiology,</li> <li>Prevalence and incidence, risk factors, manifestations and complications.</li> <li>Identify abnormalities in investigations for blood sugar levels including HbA1c.</li> <li>Propose diagnostic tests used for screening diagnosis and monitoring of diabetes mellitus.</li> </ul>					
	F	Rheumatology			
16.	Rheumatoid Arthritis	LGIS	Dr. Asim Ali Shah	Should Know	
Learn	ing Outcomes:				
• I	Discuss etiology, Symptoms and	signs of the disea	se		
• I	Diagnose the patient on the basis	s of presenting con	nplaints and clini	ical examination	
• I	nterpret relevant Investigations	and laboratory fin	dings.		
	Recognize complications and the	_	_		
17.	Osteoarthritis	LGIS	Dr. Asim Ali Shah	Should Know	
• I	Diagnose the patient on the basis Determine causes of osteoarthrit Findings.  Manage complications of the dis	is Established thro	-		
18.	Osteomalacia, Rickets &	LGIS	Dr. Asim Ali	Should Know	
	Osteoporosis		Shah		
<ul> <li>Correlate Pathophysiological basis of various etiological factors to clinical manifestations of Osteomalacia, Rickets &amp; Osteoporosis disorder.</li> <li>Devise plan for diagnosis and clinical management of each of the above disorders.</li> <li>SLE</li> <li>LGIS</li> <li>Dr. Asim Ali Should Know Shah</li> </ul>					
	Learning Outcomes:				
<ul> <li>Define diagnostic criteria SLE</li> <li>Suggest therapeutic options and investigations after establishing diagnosis based on etiology, clinical</li> <li>Presentation And investigations &amp; Manage complications.</li> </ul>					
20.	Scleroderma & MCTD	LGIS	Dr. Asim Ali Shah	Should Know	
	Learning Outcomes:				
<ul> <li>Suggest therapeutic options and investigations after establishing diagnosis based on etiology, clinical Presentation and investigations</li> </ul>					
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		Psychiatry			
21.	Stress Disorders	LGIS	Dr. Faheem Qasim	Must Know	
	ing Outcomes:				
	Classify Stress Disorders	D' 1			
	Discuss the Management of Stre		Du Estima	March Warner	
22.	Substance use Disorders	LGIS	Dr. Fatima Amir	Must Know	
	ing Outcomes:				
	Elaborate the different groups of	_			
	Suggest the laboratory investigated		lanagement		
	Evaluate the prognosis of substa		D E 1	01 1177	
23.	Schizophrenia	LGIS	Dr. Faheem	Should Know	
<b>T</b>	• • •		Qasim		
	ing Outcomes:	n sions and			
	Diagnose Schizophrenia based o			and :4a	
	Devise a plan for treatment of di vithdrawal.	sease, side effects	or the treatment	and its	
	Assess prognosis of the disease.				
24.	Suicide & Deliberate Self	LGIS	Dr. Fatima	Must Know	
24.	Harm	LOIS	Amir	Wiust Kilow	
Lagra	ing Outcomes:		7 XIIII		
	Diagnose mood Disorder on the	hasis of etiology			
	dentify Suicide & Deliberate So				
	Discuss its Management and pro				
		Dermatology			
25.	Seborrhoeic and Contact	LGIS	Brig(R).	Must Know	
	dermatitis		Naveed		
			Akhtar Malik		
Learn	ing Outcomes:				
	Classify Dermatitis				
	Apply diagnostic criteria to clini	cal assessment of	Seborrhoeic and	Contact	
	Dermatitis				
• I	Develop management plan of Se	borrhoeic and Cor	ntact Dermatitis		
26.	Atopic Dermatitis	LGIS	Brig(R).	Must Know	
			Naveed		
			Akhtar Malik		
	Learning Outcomes:				
	Classify Dermatitis				
<ul> <li>Apply diagnostic criteria to clinical assessment of Atopic Dermatitis</li> </ul>					
	Develop management plan of At				
27.	Bullous Disorders	LGIS	Brig(R).	Must Know	
			Naveed		
			Akhtar Malik		
	ing Outcomes:				
Classify Bullous Disorders					

		1	D 11 D' 1		
	<ul> <li>Apply diagnostic criteria to clinical assessment of Bullous Disorders</li> </ul>				
	Develop management plan of Bu		ı		
28.	Sexually Transmitted	LGIS	Brig(R).	Should Know	
	diseases		Naveed		
			Akhtar Malik		
Learr	ning Outcomes:				
• ]	Make clinical diagnosis by asses	sing symptoms.			
• ]	ist necessary investigations				
• ]	Discuss management of the cond	lition.			
	Eme	ergency Medicine			
29.	Electrocution	LGIS	Dr. Turab F.	MUST KNOW	
			Abidi		
Learr	ning Outcomes:				
	Correlate pathophysiological bas	sis of various etiol	ogical factors cli	nical	
	manifestations of Electrocution				
• ]	Devise plan for diagnosis & mar	nagement of Electr	ocution		
30.	Drowning	LGIS	Dr. Turab F.	MUST KNOW	
	8		Abidi		
Learr	ning Outcomes:	ı			
	Correlate pathophysiological bas	sis of various etiol	ogical factors cli	nical	
	manifestations of Drowning		8		
	Devise plan for diagnosis & mar	nagement of Drow	ning		
31.	General approach to a	LGIS	Dr. Turab F.	MUST KNOW	
	patient with poisoning		Abidi		
Learr	ning Outcomes:		1 10101		
	Devise plan for diagnosis & mar	nagement of poison	ning		
	· •	_	_	n	
	<ul> <li>Diagnose paracetamol poisoning on the basis of clinical presentation</li> <li>Apply the concepts of mode of reversal to the dosage and route of reversal</li> </ul>				
medication					
Enumerate the complication					
32.	Envenomation – Snake Bite	LGIS	Dr. Turab F.	SHOULD	
32.	Envenomation – Shake Bite	LOID	Abidi		
Loope					
	Learning Outcomes:				
	<ul> <li>Classify Snake bite, based on clinical features.</li> <li>List the immediate management and long term management.</li> </ul>				
<ul> <li>List the immediate management and long term management</li> </ul>					

- Discuss the antivenom type and dosing and the criteria of administering antivenom
- Enumerate the various complications

#### **Learning Resources:**

#### 1. Reference books:

- a. Davidson's Principles & Practice of Medicine 23th EditionElsevier
- b. Current Medical diagnosis & treatment ( Latest Edition 2022)
- 2. Online resources
  - a. www.medscape.com
- 3. Library resources
  - a. Harrison's Principles of Internal Medicine 20th Edition

# (2018).McGraw Hill Education

# **Teaching faculty**

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Brig(R). Naveed Akhtar Malik	

# **Assessment formats**:

Assessment Strategies (Formative)	Assessment Strategies (Summative)
In class discussions	Practical Clinical Exam
SGD	(Short & Long Cases)
	MCQs at the end of block

# **Surgery**

#### **Learning Outcomes:**

At the end of this block students will be able to.

- Describe the common surgery related cardiovascular diseases and their presentations and outline the basics of their management. (SLO 1,2,3,4)
- Describe the common gastrointestinal pathologies and rationalize appropriate management plans. (SLO 1,3,4)
- Diagnose the common and outline the management upper/ lower limb fractures (SLO 2,3,4,5)
- Describe principles and types of anesthesia.

(Detail of skill related outcomes can be found in surgery Logbooks))

S#	Topic	Educational Strategies	Names of Instructor	Importance (Must Know Should Know Could Know)			
General Surgery							
1.	Breast	LGIS	Prof. Dr. Naeem Ashraf	Must Know			
Lea	rning outcomes:						
•	Classify Benign Breast Disease						
•	Diagnose Benign breast disease l	based on histor	y and clinical presen	ntation			
•	Enumerate the Diagnostic invest	igations of Ben	ign Breast Diseases	3			
•	Design management plan for Ber	nign Breast Dis	ease and its compli	cation			
•	Suggest management plan for Ca concepts of anatomy and lympha			ying basic			
•	Diagnose Ca Breast based on sig	ns and sympton	ns and investigation	ns			
2.	Skin / subcutaneous tissue	LGIS	Assoc. Prof. Dr. Naeem Akhtar	Must Know			
Lea	rning outcomes:						
•	Describe the principle of Skin an	d Subcutaneou	s swelling and it ma	anagement.			
3.	Burn	LGIS	Asstt. Prof. Dr. Munawer Latif	Should Know			
Learning outcomes:							
•	Describe the principle of Burn ar	nd its managem	ent				
4.	Surgery anastmosis/ sutures	LGIS	Prof. Brig Dr.	Should Know			
			Muhammad				
			Parvez				

Lea	rning outcomes:				
•	<ul> <li>Describe the surgery anastomosi</li> </ul>	s and suturing	technique.		
5.	Principles of Oncology surgery risk factors	LGIS	Assoc. Prof. Dr. Muhammad Azhr	Nice to Know	
Lea	rning outcomes:				
•	<ul> <li>Describe the principles of oncolo management.</li> </ul>	ogy surgery and	l its risk factors, inv	vestigation and its	
6.	Radiotherapy/ Chemotherapy	LGIS	Prof. Dr. Naeem Ashraf	Nice to Know	
Lea	rning outcomes:				
	Describe the radiotherapy and ch	nemothetapy.			
7.	Hernia	LGIS	Prof. Brig(R) Dr. Mannan Masud	Should Know	
Lea	rning outcomes:				
	• Describe the type of inguinal scr	otal hernia and	its management.		
		Orthopedics			
8.	Spine fracture and dislocations	LGIS	Dr. Muhamamd Ikram	Nice to Know	
Lea	rning outcomes:				
	• Describe the spine fracture and o	lislocations and	Lits management.		
9.	Paralytic disorders ( Polio,	LGIS	Dr. Muhammad	Nice to Know	
_	Cevebral, Palsy, Spina bifida)		Ikram		
Lea	rning outcomes:				
•	<ul> <li>Describe the type paralytic disor management.</li> </ul>	ders (Cevebral,	Polio, Palsy , Pina	bifida) and its	
10	Tumours of Musculoskeletal	LGIS	Dr. Muhamamd	Nice to Know	
	System		Ikram		
Lea	rning outcomes:				
(	<ul> <li>Describe the tumours of musculo</li> </ul>	oskeletal systen	n and its manageme	ent.	
11	,	LGIS	Dr. Sajid Ejaz Rao	Should Know	
Lea	Arthoplasty rning outcomes:		Nau		
10	Describe Arthiritis, arthodesis, a	nd arthoplasty	D. C I E	C1 1 1 1/	
12	Acute +Chronic Infection of bones and joints		Dr. Sajid Ejaz Rao	Should Know	
Lea	rning outcomes:				
		ation of honor	and joints and its	anagamant	
	Describe the Acute/Chronic infe	Urology	ana joints and its in	anagement.	
13	Introduction to urology,	LGIS	Dr. Abdullah	Should Know	
	symptoms, investigations				

14	Acute+ Chronic infections of
	urinary tract
15	Kidneys + Ureters
16	Urinary bladder
17	Incontinance, Urinary diversion
	& Urodynamics
18	Prostate + seminal vesicles

#### **Learning outcomes:**

- Identify basis for diagnosing hematuria.
- Recognize those pigments that may discolor the urine, mimicking hematuria.
- Give a differential diagnosis for hematuria originating in the different anatomical parts of the urinary tract.
- justify the significance of the information gathered from the palpation of the prostate rectally.
- List the radiological investigations available for the assessment of the urinary tract
- Manage the patient with visible and non-visible hematuria.
- Differentiate between obstruction at different levels of the urinary tract based on history, Clinical features and diagnostic modalities
- Discuss the presenting features, signs and symptoms of urological emergencies
- Generate a prioritized differential of the most important and likely causes of a patient's emergency
- Study the classification of urological emergencies based on etiology
- Discuss the appropriate investigations leading to a definite diagnosis
- Devise a management plan according to clinical presentation
- Review the epidemiology and causes
- List the risk factors for carcinoma of

19 Urethra & penis	LGIS	Dr. Abdullah	Should Know
20 Testes + Scrotum			
21 Urolithiasis			
22 Urogenital system trauma			

- Outline the initial diagnostic workup for patients suspected of having carcinoma of urinary system
- Discuss the grading and staging of carcinoma of urinary tract
- Plan the general management and pre-operative workup of patient
- Suggest the potential options for treatment of carcinoma of urinary tract

Implement effective treatment options for advanced and metastatic basal cell carcinoma (BCC) based on efficacy data and current guidelines.

	Anesthesia								
23.	Pre anaesthesia assessment	LGIS	Prof. Brig (R) Dr. Imran Ul Haq	Should Know					
Lea	Learning outcomes:								

Describe the pre anaesthesia and its management.

24	Regional anaestheisa/ nerve	LGIS	Prof. Brig (R)	Nice to Know
	block		Dr. Imran Ul	
			Haq	

#### **Learning outcomes:**

• Describe the regional anaesthesia/ nerve block and its management.

Radiology							
25 Imaging of GIT	LGIS	Dr. Nadia Gull	Should Know				
26 Imaging of Musculoskeletal							
27 Imaging of Urinary system							

#### **Learning outcomes:**

- Differentiate between different types of chest injuries based on mechanism of pathophysiology findings, and management.
- Demonstrate knowledge, clinical and technical skills and decision-making capabilities with respect to diagnostic imaging pertinent to the practice of General Surgery
- State the basic principles of radiation protection and law in relation to use of ionizing radiation
- Justify use of relevant imaging techniques invarious clinical scenarios reference to advantages and disadvantages.
- 1. Principles of Management of urology diseases.
- 2. Principles of Management of Surgical Disease & Breast Pathologies
- 3. Principles of Management of orthopeadics Trauma and Pathologies
- 4. Principles & type of Aneasthesia

#### **Learning Resources:**

#### 1. Reference Books

• Bailey & Loves, Norman brows, clinical method, Essential Orthopaedics (including Clinical method & Anesthesia for medical students

#### 2. Online Resources

Zoom

#### **Teaching Faculty:**

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Prof. Brig Imran ul Haq	Imr59us81@hotmail.com

# **Gynecology**

- **1.** Manage common obstetrics & gynaecological illnesses of women with evidence-based care.
- 2. Assist in management of gynaecological cases as a member of health care team.

#### **Block Learning Outcomes:**

- 1. Identify the clinical presentation, diagnosis and plan management of women with medical complications of pregnancy (chronic renal disease, autoimmune diseases SLE, APS, Epilepsy) and recognize limitations and escalate care to senior colleagues and other specialties when appropriate.
- 2. Make a management plan for patients with benign and malignant diseases of the uterus, cervix and ovary based on findings of history, examination & investigations.

3. Differentiate between different types and formulate a management plan for patients with urinary incontinence.

S	<b>.</b> #	Topic	Educational Strategies	Name of Instructor	Importance (Must Know Should Know Could Know)
	1.	Urogynecology: Urinary incontinence	LGIS	Dr. Noreen Majeed	Should Know

#### **Learning Outcomes:**

- Classify urinary incontinence
- Differentiate between detrusor overactivity and urodynamic stress incontinence. Categorize the symptoms associated with different types of incontinence, voiding difficulty & vesicovaginal fistula.
- Critically appraise the role of urodynamic investigations in diagnosis of different types of incontinence

• Appraise the principles of management in treatment of various incontinence

2.	Renal diseases in pregnancy	LGIS	Dr.	Should Know
			Shabana	
			Kalsoom	

#### **Learning Outcomes:**

- Describe effects of pregnancy on chronic kidney disease
- Explain effects of chronic kidney disease on pregnancy
- Discuss pre-pregnancy counseling and management of women with CKD
- Review management of pregnant women with renal transplant
- Discuss causes and management of women with acute renal failure in pregnancy

3.	Benign conditions of uterus and	LGIS	Prof.	Must Know			
	cervix: cervical ectopy, Uterine		Mehreen				
	fibroids and adenomyosis		Mehdi				
Learning Outcomes:							

- Describe the common benign conditions of the uterus and cervix.
- Identify the presenting symptoms and examination findings associated with uterine fibroids & adenomyosis.
- Appraise the principles of management of fibroid uterus & adenomyosis
- Describe the common tests used to evaluate the uterus & endometrial cavity

4.	Premalignant and malignant	LGIS	Prof Dr.	Must Know
	conditions of cervix		Humaira	
			Nasir	

#### **Learning Outcomes:**

- Discuss the aetiology, pathophysiology, diagnosis and management of cervical intraepithelial neoplasia (CIN)
- Suggest primary prevention of cervical cancer through human papilloma virus (HPV) vaccination & cervical screening
- Discuss the aetiology, diagnosis, International Federation of Gynaecology and Obstetrics (FIGO) staging and management of malignant disease of cervix

5.	Benign ovarian tumours	LGIS	Prof. Dr.	Must Know
			Mehreen	
			Mehdi	

#### **Learning Outcomes:**

- Classify common benign tumours of ovary
- Discuss relevant investigations, role of tumour markers and follow up of ovarian cyst
- Describe the clinical presentation and principles of management of benign disease of ovary

6.	Malignant ovarian tumours	LGIS	Dr.	<b>Should Know</b>
			Shabana	
			Kalsoom	

#### **Learning Outcomes:**

- Classify malignant ovarian tumors
- Enumerate risk factors which increase and decrease the risk of ovarian cancer
- Discuss the genetic factors, clinical presentation & relevant investigation of malignant disease of ovary
- Recall FIGO staging of ovarian cancer & survival by stage.
- Appraise the management (surgery & chemotherapy) of ovarian cancer

		101		
7.	<b>Endometriosis and chronic</b>	LGIS	Prof. Kinza	Must Know
	pelvic pain		Alam	

- List the gynaecological and non gynaecological causes of chronic pelvic pain
- Appreciate the multifactorial nature of CPP & potential management options

- Explain the pathology of endometriosis & its involvement in CPP and subfertility
- Discuss the diagnosis and treatment of endometriosis

8.	Benign and malignant	LGIS	Dr. Noreen	must Know
	conditions of endometrium		Majeed	

#### **Learning Outcomes:**

- Discuss the clinical presentation, diagnosis and management of endometrial polyp
- Describe the incidence & classification of Endometrial carcinoma
- Describe the presentation and investigations needed for women with suspected endometrial cancer
- Discuss the FIGO staging of endometrial cancer & survival by stage.
- Appraise the principles of management (role of surgery, radiotherapy & palliative treatment) of endometrial cancer

9.	Medical disorders in pregnancy:	LGIS	Prof. Dr.	Should Know
	SLE, APS, Rheumatoid		Khair-Un-	
	arthritis, Epilepsy		Nisa	

- Counsel the women in pre-pregnancy period & adopt multidisciplinary approach to improve pregnancy outcomes in women having any medical condition
- Appraise the effect of autoimmune disease on the mother and fetus in pregnancy and outline the management plan
- Describe antepartum, intrapartum and postpartum principles of management of epilepsy in pregnancy
- Recognize the related drugs with safety profile and those which have teratogenic effects on the baby.

#### **Learning Resources:**

#### 1. Reference Books

- Obstetrics by ten teachers 20<sup>th</sup> edition
- Gynaecology by ten teachers 20th edition

#### 2. Library resources

- Hacker and Moore's essential obstetrics 6<sup>th</sup> edition
- High Risk pregnancy 5<sup>th</sup> edition
- Shaw's text book of gynaecology 17<sup>th</sup> edition

# 3. **Teaching faculty:**

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Dr Shabana Kalsoom	shabanakalsoom@hotmail.com
Dr khair-Un-Nisa	Khairunasif5@gmail.com

## 4. Assessment formats:

Assessment Strategies (Formative)	Assessment Strategies (Summative)
SEQ, MCQ	SEQ, MCQ, OSPE

#### **Pediatrics**

#### **Learning Outcomes**

The students should be able to:

- Diagnose, investigate and plan management of common renal disorders.
- Recognize complications & preventive measures and discuss prognosis of pediatric renal disorders.
- Diagnose, investigate and plan management of acute and chronic kidney injury
- Etiology, investigations & management plan of chronic cough & recurrent chest infection
- Diagnose, investigate and plan management plan of tonsillitis, phyrangitis & peritonsillar abscess.

Sr.#	Торіс	Educational Strategies	Names of Instructor	Importance (Must Know Should Know Could Know)	
		NEPHROLOY			
1.	Child with Edema	LGIS	Prof. Munazza Saleem	Must Know	
Learr	ning Outcomes:				
•	Define and list differential di	agnosis of edem	a.		
•	Define and explain pathophy	siology of Neph	rotic syndrome.		
•	<ul> <li>Recognize clinical features, list investigations and outline management plan of Nephrotic syndrome</li> </ul>				
•	List complications and discus	ss prognosis of N	Nephrotic syndrome	2	
2.	Child with deranged RFTS	LGIS	Prof. Munazza Saleeem	Must Know	
Learr	ning Outcomes:				
<ul> <li>Discuss pathophysiology, clinical manifestations and complications of CKD and AKI</li> </ul>					
	List investigations and outlin				
3.	Child with Hematuria	LGIS	Dr Sohail Ashraf	Must Know	

- Define and list differential diagnosis of hematuria
- Define and explain pathophysiology of AGN.
- Recognize clinical features, list investigations and outline management plans of AGN.

4	List complications and discus		I .	Chould Vnov	
4.	Urinary tract infections & VUR	LGIS	Dr Rakshanda Umar	Should Know	
Learn	ing Outcomes:				
•	Define UTI.				
•	Discuss clinical features, inve	estigations and c	omplications of U	ГІ	
•	Outline management of				
•	UTI.				
•	Describe pathophysiology,				
•	clinical features and				
•	investigations of VUR				
•	Outline management of				
•	VUR and discuss the progno				
5.	Acute Kidney injury	LGIS	Dr Sobia Noor	Should Know	
Learn	ing Outcomes:				
•	Etiology of acute kidney inju	ry			
•	Symptoms & diagnostic clue	s in history and	examination		
•	Plan of investigation				
•	Management steps				
•	Complications of AKI	I CIC	Day CM	C1 1.1 IZ	
6.	<ul> <li>Chronic Kidney</li> <li>Disease</li> </ul>	LGIS	Prof Munazza Saleem	Should Know	
Learn	ing Outcomes:				
•	Etiology of chronic kidney d	isease			
•	Symptoms & diagnostic clue	s in history and o	examination		
•	Plan of investigation				
•	Management steps				
Complications of CKD					
7.		RESPIRATION LGIS	N Dr. Sohail	Must Know	
7.	<ul> <li>Chronic cough / Recurrent chest infections</li> </ul>	LOIS	Ashraf	Wiust Know	
Learn	ing Outcomes:				
<ul> <li>List differential diagnosis of child with Chronic cough / Recurrent chest infections</li> </ul>					

- Describe the pathophysiology of TB, CF, Immotile cilia syndrome Bronchiectasis, Pertussis.
- Identify signs & symptoms of diseases causing chronic cough / Recurrent chest infections
- List complications of diseases causing chronic cough / Recurrent chest infections.
- List investigations and enumerate management steps of diseases causing chronic cough / recurrent chest infections.
- Interpret radiological findings and investigations of diseases causing Chronic cough / Recurrent chest infections.
- List preventive measures of diseases causing Chronic cough / Recurrent chest infections.

• Discuss prognosis.

	<u> </u>			
8.	<ul> <li>Tonsillitis / Pharyngitis</li> <li>&amp; Peritonsillar abscess</li> </ul>	LGIS	Dr. kiran Shah	Should Know

#### **Learning Outcomes:**

- Define Tonsillitis, pharyngitis & peritonsillar abscess
- Etiological factors.
- Approach to diagnosis.
- Outline management plan.
- Discuss complications

#### **Learning Resources:**

#### 1. Reference Books

• Basis of Pediatrics by Parvez Akbar Khan

#### 2. Online resources

• drtahirnoor@hotmail.com

#### 3. Library resources

- Textbook of Pediatrics by PPA
- Current Pediatric Diagnosis & Treatment
- Harriet & Lane Handbook of Pediatrics
- Pediatrics illustrated text book by Tom Lissauer

#### **Assessment formats:**

Assessment Strategies (Formative)	Assessment Strategies (Summative)
MCQ, SEQ, Mini CEX	MCQ, SEQ, Long case, short case

# 7. Rules & Regulations:

#### i. Student's code of conduct

The Student Code of Conduct sets out the standards of conduct expected of students. It holds individuals and groups responsible for the consequences of their actions. Failure to fulfill these responsibilities may result in the withdrawal of privileges or the imposition of sanctions.

Wah Medical College is a community of students, faculty and staff involved in learning, teaching, research and other activities. All members of WMC community are expected to conduct themselves in a manner that contributes positively to an environment in which respect, civility, diversity, opportunity and inclusiveness are valued, so as to assure the success of both the individual and the community. The Student Code of Conduct reflects a concern for these values and tries to ensure that members of the WMC can make use of and enjoy the activities, facilities and benefits of WMC without undue interference from others.

#### ii. WMC student code of conduct

- Discipline
- Decent dress
- Good Manners
- Smart Turn Out
- Healthy Activities
- No smoking
- No Abusive Language
- Cooperative Attitude
- Respect for All

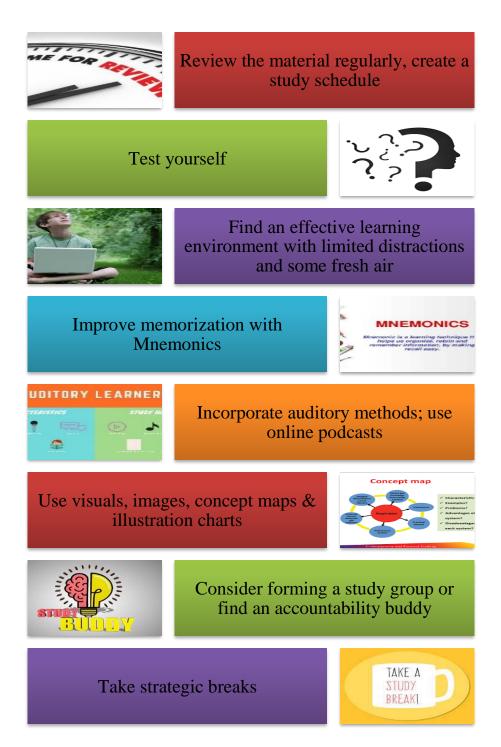
## iii. Attendance policy

- a. Students are required to mark attendance for every class.
- b. The attendance is compiled by the respective department and submitted to student affairs by the 10<sup>th</sup> of each month.
- c. The Students Affair Department will compile the absent report and a fine of Rs. 500/- for a lecture or for the whole day will be imposed on absent students.
   It is pertinent to mention here that a fine is imposed on students to compel them to attend classes regularly and not to generate the funds.
- d. A compiled attendance state of all students along with those having attendance less than 75% duly highlighted will be submitted to the Students Affairs Department on monthly as well as quarterly basis by the concerned departments.
- e. At the end of the academic year, a consolidated state of attendance of students will be submitted to the Students Affair Department.
- f. Departments will submit the list of those students having attendance less than 75% at the end of academic year.
- g. Admission forms of students having attendance less than 75% will NOT be submitted to NUMS for appearing in Annual University Exams.

# 8. Study tips

Dear Students,

Becoming a doctor is a tough job, but you can make it easier for yourself by adopting some time-tested techniques or habits. It's never too early – or too late – to develop good study habits. The sooner you get into a good self-study pattern, the easier everything will be and the more your chances of getting good marks will improve. Here are our top tips for getting the most out of your self-directed study time. And remember **Perseverance is the Key to Success!** 



# 9. Feedback on the study guide

We value your feedback and will use it for improvement of this Study guide. Kindly provide feedback for this study guide. At the email: <a href="mailto:dme@wahmedicalcollege.edu.pk">dme@wahmedicalcollege@gmail.com</a>

# 10. References:

HARDEN, J.M. LAIDLAW, E.A. HESKETH, R. M. (1999). AMEE Medical Education Guide No 16: Study guides-their use and preparation. *Medical Teacher*, 21(3), 248–265. https://doi.org/10.1080/01421599979491

#### Ith rear the shares IdBi Days Friday Thursday Wednesday Tuesday Monday 27-01-2023 26-01-2023 25-01-2023 24-01-2023 23-01-2023 Dr. S. Sabah Imran 5 - Sangara 2 C - H.J.:... E - C.... H.J 7 - Pallialing ..... Sed Clinical Hadicina 1:00-11:00 1:00-01:45 Preferrer SIBT è Break 11:00-:11:15 Pathelegy Pathelegy Surgery Cam.mad C 1:45-09:30 11:15-12:05 SIBT \*\* Flipped Clare Plipped Clur Lact #4 Lact #4 Lact #4 Lact #4 SIBT SIBT Surgary 9:30-10:15 (12:05 -Lact #4 SIBT Madicina E ETE 12:05-12:55 (E,F,G,H) 10:15-11:05 Gynes-Ohr Wah Medical College 4th Year MBBS Session 2022-2023 Time Table From: 23-01-2023 To 27-01-2023 : 5 Lact #4 Lact #4 Lact #4 SIBT FIELS SIBT Break 11:05-11:20 (17th Batch) C .... Pathelegy (12:05-1:05) 11:20-12:10 Pathelagy Hadicina Surgery \* 5 FIEL 12:55-1:45 Peckel . (Practical) (A. B. C. D) 12:10-1:00 Lact #4 Lact #4 Lac #4 SIBT FIEL 5191 FIEL :: Lack Break 1:45-2:00 1:30 Nah Hadisal Callege . Nah Cantt C .... 1:30-2:15 Prefazzer. Dr. Hararat Ramzan Pathelagy Cam.mad P-CHILE Heaters Peak Course Code:Y4B1 (A.B.C. 2:15-3:0 Academic Week: Lact#5 26D Does! Tics Principal 2:00-3:00 (Practical) Pathelagy 1:30-3:00 Lact #4 Lact #4 Lact #4 Lact #4 SIBT FIELS 98 **960** \*\*\*

# 11. Time Table Template