ISO CERTIFIED 9001:2015

LIAQUAT UNIVERSITY
OF MEDICAL & HEALTH SCIENCES,
JAMSHORO, SINDH

STUDY GUIDE

FINAL PROFESSIONAL

BATCH 2020-21

MBBS

ACADEMIC SESSION 2024-25

ACADEMIC CALENDAR

Academic Session 2024-2025

Activity	Class Year	Dates
Classes starts	All Batches of MBBS	January 27, 2025
Eid-ul-Fitr	Holiday	March 31 to April 06, 2025
Classes Resumes	All Batches of MBBS	April 07, 2025
Summer Vacation/ Internship/Elective	1st to 4th Year MBBS	June 07 to July 06, 2025
Summer Vacation/ Tour	Final Year MBBS	June 07 to July 06, 2025
Classes Resumes	All Batches of MBBS	July 07, 2025
Classes Ends	1st to 4th Year MBBS	November 07, 2025
	Final Year MBBS	December 05, 2025
Exam Preparation	1st to 4th Year MBBS	November 08 to November 30, 2025
	Final Year MBBS	December 06 to January 04, 2026
Annual Examination	1st to 4th Year MBBS	December 01 to December 31, 2025
	Final Year MBBS	January 05 to January 31, 2026
Winter Vacation	1st to 4th Year MBBS	January 01, 2026 to January 04, 2026

FINAL PROFESSIONAL MBBS

[BATCH 2020-21]

LECTURE SCHEDULE (FOR 10 WEEKS ROTATION IN MEDICINE AND SURGERY)

VENUE FOR LECTURES

MEDICINE> NEW MEDICNE LECTURE HALL PHARMA DEPARTMENT

SURGERY> BDS LECTURE HALL PHARMA DEPARTMENT

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
08.15 AM TO 09.00 AM	MEDICINE IV	MEDICINE III	MEDICINE II	MEDICINE I	ONCOLOGY LECTURE 07 WEEKS FAMILY MEDICINE LEC 03 WEEKS
	SURGERY I	SURGERY II	SURGERY III	SURGERY IV	SURGERY LECTURES
09.00 AM TO 03.00 PM*	HOSPITAL POSTING	HOSPITAL POSTING	HOSPITAL POSTING	HOSPITAL POSTING	HOSPITAL POSTING

NOTE: THERE WILL BE NO COMBINE LECTURES OF PEDIATRICS AND GYNAE/OBSTETRICS

ROUND	ONCOLOGY LECTURES	FAMILY MEDICINE
I	January 31 to March 14	March 21 to April 11
II	April 18 to May 30	June 06 to July 18
III	July 25 to September 05	September 12 to 26
IV	October 03 to Nov 14	Nov 21 to Dec 05

***HOSPITAL POSTING:**

SURGERY MEDICINE PAEDS GYNAE IV AND PULMONOLOGY AT LUH JAMSHORO

GYNAE I II III GASTROENTEROLOGY CARDIO THORACIC SURGERY AND PAEDS SURGERY AT LUH CITY HYDERABAD

SCHEDULE OF HOSPITAL POSTING (10 WEEKS) ROUND ONE

DATE	MEDICINE				PAEDIATRICS		SURGERY				GYNAECOLOGY			
	I	II	III	IV	I	II	I	II	III	IV	I	II	III	IV
27 JAN	A1	A2	A3	A4	A 5+6	A 7+8	B1	B2	B3	B4	B5	B6	B7	B8
28														
29														
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10											B8	B5	B6	B7
11														
12														
13	A2	A3	A4	A1			B2	B3	B4	B1				
14														
17														
18														
19														
20														
21														
24					A 7+8	A 5+6					B7	B8	B5	B6
25														
26														
27														
28														
03 MAR	A3	A4	A1	A2			B3	B4	B1	B2				
04														
05														
06														
07														
10											B6	B7	B8	B5
11														
12														
13														
14														
17														
18														
19	A4	A1	A2	A3			B4	B1	B2	B3				
20														
21														
24					GASTRO	PULMO					PAED SUR		CT SUR	
25					A 5+6	A 7+8					B 5+6		B 7+8	
26														
27														
28														
07 APRIL					GASTRO	PULMO					PAED SUR		CT SUR	
08					A 7+8	A 5+6					B 7+8		B 5+6	
09														
10														
11														

SCHEDULE OF HOSPITAL POSTING (10 WEEKS) ROUND TWO

DATE	MEDICINE				PAEDIATRICS		SURGERY				GYNAECOLOGY			
	I	II	III	IV	I	II	I	II	III	IV	I	II	III	IV
14 APRIL	A5	A6	A7	A8	A 1+2	A 3+4	B5	B6	B7	B8	B1	B2	B3	B4
15														
16														
17														
18														
21														
22														
23														
24														
25														
28											B2	B3	B4	B1
29														
30														
01 MAY	A6	A7	A8	A5			B6	B7	B8	B5				
02														
05														
06														
07														
08														
09														
12					A 3+4	A 1+2					B3	B4	B1	B2
13														
14														
15														
16														
19	A7	A8	A5	A6			B7	B8	B5	B6				
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29														
30														
02 JUNE														
03														
04	A8	A5	A6	A7			B8	B5	B6	B7				
05														
06														
07 JULY					GASTRO	PULMO					PAED SUR		CT SUR	
08					A 1+2	A 3+4					B 1+2		B 3+4	
09														
10														
11														
14					GASTRO	PULMO					PAED SUR		CT SUR	
15					A 3+4	A 1+2					B 3+4		B 1+2	
16														
17														
18														

SCHEDULE OF HOSPITAL POSTING (10 WEEKS) ROUND THREE

DATE	MEDICINE				PAEDIATRICS		SURGERY				GYNAECOLOGY			
	I	II	III	IV	I	II	I	II	III	IV	I	II	III	IV
21 JULY	B1	B2	B3	B4	B 5+6	B 7+8	A1	A2	A3	A4	A5	A6	A7	A8
22														
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24														
25														
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29														
30														
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01 AUGUST														
04											A8	A5	A6	A7
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07	B2	B3	B4	B1			A2	A3	A4	A1				
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18					B 7+8	B 5+6					A7	A8	A5	A6
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25	B3	B4	B1	B2			A3	A4	A1	A2				
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01 SEP											A6	A7	A8	A5
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10	B4	B1	B2	B3			A4	A1	A2	A3				
11														
12														
15					GASTRO	PULMO					PAED SUR		CT SUR	
16					B 5+6	B 7+8					A 5+6		A 7+8	
17														
18														
19														
22					GASTRO	PULMO					PAED SUR		CT SUR	
23					B 7+8	B 5+6					A 7+8		A 5+6	
24														
25														
26														

SCHEDULE OF HOSPITAL POSTING (10 WEEKS) ROUND FOUR

DATE	MEDICINE				PAEDIATRICS		SURGERY				GYNAECOLOGY			
	I	II	III	IV	I	II	I	II	III	IV	I	II	III	IV
29 SEP	B5	B6	B7	B8	B 1+2	B 3+4	A5	A6	A7	A8	A1	A2	A3	A4
30														
01 OCT														
02														
03														
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08														
09														
10														
13											A2	A3	A4	A1
14														
15														
16	B6	B7	B8	B5			A6	A7	A8	A5				
17														
20														
21														
22														
23														
24														
27					B 3+4	B 1+2					A3	A4	A1	A2
28														
29														
30														
31														
03 NOV	B7	B8	B5	B6			A7	A8	A5	A6				
04														
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12														
13														
14														
17														
18														
19	B8	B5	B6	B7			A8	A5	A6	A7				
20														
21														
24					GASTRO	PULMO					PAED SUR		CT SUR	
25					B 1+2	B 3+4					A 1+2		A 3+4	
26														
27														
28														
01 DEC					GASTRO	PULMO					PAED SUR		CT SUR	
02					B 3+4	B 1+2					A 3+4		A 1+2	
03														
04														
05														

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF

SURGERY

ACADEMIC SESSION 2024-25

DEPARTMENT OF SURGERY

S #	TEACHING FACULTY		
	PROFESSORS		
01	**CHAIRMAN:** Prof Altaf Ahmed Talpur	**04**	Prof Arshad Hussain Abro
02	Prof Shahida Khatoon	**05**	Prof. Rasool Bux Behan
03	Prof Ahsan Ali Laghari	**06**	Prof. Champa Sushel
	ASSOCIATE PROFESSORS		
07	Dr. Zameer Hussain Laghari	**12**	Dr. Sohail Ahmed Memon
08	Dr. Ahmed Hussain Pathan	**13**	Dr. Aijaz Ahmed Shaikh
09	Dr. Zubair Ahmed Yousfani	**14**	Dr. Qambar Ali Laghari
10	Dr. Abdul Rasheed Surahio	**15**	Dr. Nawaz Ali Dal
11	Dr. Syed Fazila Hashmi	**16**	Dr. Muhammad Akbar Majeed
	ASSISTANT PROFESSORS		
17	Dr. Abdul Salam Memon	**23**	Dr. Ghulamullah Rind
18	Dr. Ahmer Akbar Memon	**24**	Dr. Faiza Hameed
19	Dr. Khinpal Das	**25**	Dr. Sandesh Kumar
20	Dr. Shiraz Shaikh	**26**	Dr. Shahnawaz Khatti
21	Dr. Samina Naz	**27**	Dr. Ishrat Rahim
22	Dr. Bilal-e-Rasool	**28**	Dr, Mujeeb ur Rehman
	SENIOR REGISTRARS		
29	Dr. Kareem Bux Bhurgari	**30**	Dr. Muhammad Anwar Memon

Integrated modular curriculum

Final year Syllabus for the Subject of Surgery

Introduction:

Integrated modular curriculum for the subject of General Surgery of final year MBBS is divided into 12 modules with 03 modules are distributed to each surgical unit.

Each module comprises of 03 weeks academic teaching. It includes lectures, ward teaching and skill lab teaching.

Integrated curriculum is designed to enhance learning by connecting theoretical knowledge with practical application. In contrast to traditional method, an integrated approach promotes a meaningful understanding of concepts by integrating basic science with clinical practice. Integrated approach is consistent with global trends in medical education, with an emphasis on systems-based and competency-based learning to prepare students for real-world healthcare.

Integrated curriculum allows students to relate principles of anatomy, physiology, pathology, and pharmacology to clinical scenarios. This comprehensive framework not only enhances understanding, but also improves clinical reasoning, decision-making, and problem-solving skills. By incorporating active learning methods, such as case-based discussions, simulation exercises, and interdisciplinary teamwork, students are equipped to address comprehensive patient care.

Curriculum also emphasizes professionalism, ethical consideration, and effective communication, preparing students to provide empathetic, patient-centered care. It also promotes self-directed learning, required for thriving in a rapidly changing medical education. Thus the integrated approach ensures that future doctors are competent, confident, and prepared to meet the challenges of healthcare delivery.

Rationale:

Integrated curriculum in surgery for undergraduates (Final year MBBS) is essential as this is the critical phase in preparing students for their roles as competent medical profession. By integrating anatomy, physiology, pathology, and radiology with clinical practice, students gain ability to correlate theoretical knowledge with real-life patient management. This approach enhances their diagnostic decision-making skills while preparing them to address complex clinical scenarios in a multidisciplinary healthcare setting. Additionally, integrating procedural skills and evidence-based medicine ensures that students are equipped for the need of surgical practice, from preoperative assessment to postoperative care.

Curriculum also emphasizes professionalism, ethical decision-making, and effective communication, which are critical components of patient-centered care. Teamwork and interdisciplinary collaboration exposure prepares students for real-world challenges, promoting holistic care. Curriculum not only enhances clinical competence but also instills lifelong learning habits. Ultimately, an integrated surgical curriculum

ensures that graduating students are ready to transition into their roles as capable healthcare professionals.

Learning Objectives:

At the end of the Integrated Curriculum of Surgery, students will be able to:

1. Demonstrate in-depth knowledge of anatomy, physiology, pathology and clinical features of surgical diseases, and integrate this knowledge into patient care.
2. Conduct detailed histories and physical examinations, interpret relevant diagnostic tests, and make accurate diagnoses of common surgical conditions.
3. Demonstrate in depth understanding of the indications, contraindications of common surgical procedures.
4. Integrate basic scientific and clinical knowledge for the management of surgical patients.
5. Perform basic surgical skills under supervision, including basic procedures such as wound dressing, catheterization and passing nasogastric tubes, suturing and assisting in minor surgical procedures.
6. Identify and manage surgical emergencies, including trauma, shock, and acute abdominal conditions, with an emphasis on timely interventions and stabilization.
7. Anticipate, recognize, and manage postoperative complications, including infections, bleeding, and thromboembolic events.
8. Apply principles of patient safety, sterility, infection control, and surgical ethics to clinical practice.
9. Provide compassionate, respectful and culturally appropriate care, and communicate effectively with patients and their families.
10. Work effectively within multidisciplinary teams, coordinating with anesthesiologists, radiologists, and other healthcare professionals to improve patient outcomes.
11. Recognize the role of surgery in public health, and low-resource settings, emphasizing on preventive and cost-effective care.
12. Engage in self-directed learning, and participate in clinical research to stay abreast of surgical advances.
13. Advocate professional values, ethical principles and commitment to continuous improvement in surgical care.
14. Learn to engage in modern diagnostic tools, minimally invasive surgical techniques and surgical innovations to improve patient care.

Distribution of topics to each surgical unit with schedule of teaching per Module is distributed as under;

Surgical Unit. I

Module 1: Perioperative care: Pre-operative care, postoperative care, Anesthesia and pain relief, fluid and Nutrition

Module 2: Upper GI Esophagus, stomach, duodenum, Bariatric, GI endoscopy

Module 3: Vascular disorders Arterial disorders, venous disorders, lymphatic disorders

Surgical Unit II

Module 4: Trauma Trauma, Shock, Hemorrhage, blood transfusion, metabolic response to jury, Patients care and safety

Module 5: Hepato Biliary system and pancreatic system: Biliary system, Liver, pancreas, Spleen, Minimal access surgery

Module 6: Abdominal wall Hernia and Inguino scrotal swelling Abdominal Wall Hernias, Testis and scrotum, Day care surgery

Surgical Unit III

Module 7: Wound and its management Wound, Tissue engineering and regeneration, Surgical infections, Tropical infestations

Module 8: small bowel and its related disorders Small intestine, Intestinal Obstruction, peritoneum and mesentery, inflammatory bowel disease

Module 9: Large bowel and Anal Canal Appendix, Large Gut, Rectum and anal canal

Surgical Unit IV

Module 10: Basic principles of Surgery:

Basic surgical skills, Diagnostic imaging, Tissue and molecular diagnosis, Global Health and Surgery, Transplantation

Module 11: Neck swelling and adrenal Thyroid, parathyroid, extra thyroidal neck swellings, adrenals

Module 12: **Breast and its related disorders** Breast and its related disorders, surgical oncology, Audit, Ethics

Surgical Unit I

Lectures of Surgical Unit 1 are as under;

No. of lectures	Topic covered
	Module 1: Peri operative care
1	Preoperative care, postoperative care
2	Anesthesia and pain relief
3	Fluid and Electrolyte imbalance
4	Nutrition disorders
	Module 2: Upper GI Pathology
4	Esophagus
5	Stomach and duodenum
6	Bariatric Surgery and GI endoscopy
	Module 3: Vascular Disorders
7	Arterial disorders
8	Venous disorders
9	lymphatic disorders

Tutorials of Surgical Unit 1 are as under;

No. of Tutorials	Topic covered
	Module 1: Peri operative care
1	Preoperative care, postoperative care
2	Anesthesia and pain relief
3	Fluid and Electrolyte imbalance
4	Nutrition disorders, **on Friday**
	Module 2: Upper GI pathology
5	Esophagus
6	Stomach and duodenum
7	Bariatric Surgery
8	GI endoscopy, **On Friday**
	Module 3: Vascular Disorders
9	Arterial disorders
10	Venous disorders, Varicose veins
11	Venous disorders, DVT
12	lymphatic disorders, **On Friday**

Learning Objectives of each Module with specific topics are as under;

Topic	Learning Objectives	Importance	Teaching Method	Assessment
MODULE 01				
Preoperative care and postoperative care	**Cognitive** • How to optimize patients and identification of high-risk patients? • Surgical, medical and anaesthetic aspects of assessment • How to predict and recognize most common post-operative complications **Psychomotor:** • How to prevent and treat common postoperative complications. **Affective:** • Counselling for critically ill patients and high-risk patients	Good to know Must Know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam
Anesthesia and pain relief	**Cognitive:** • Different types of anesthesia and techniques • Methods of providing pain relief **Psychomotor:** • Airway management • management of chronic and acute pain by injectables **Affective:** • follow the recommended guidelines for anesthesia and pain relief	Good to Know		
Nutrition and fluid Balance	**Cognitive:** • Assess and calculate nutritional requirement in surgical patient • Different types and routes for nutrition • Types of fluids in surgical patients • Monitor fluid challenges	Good to Know		

	Psychomotor: • Instill IV fluids and nutrition **Affective:** • Understand the choice of fluids in surgical patients	Must Know		

Topic	Learning Objectives	Importance	Teaching Method	Assessment
MODULE 02				
Esophagus	**Cognitive:** • The anatomy, physiology and pathology of esophagus • Clinical features, investigations and treatment of common benign and malignant conditions of esophagus • Corrosive injury and esophageal perforations **Psychomotor:** • Physical examination of Ca esophagus **Affective:** • Consent and counselling for surgery • Sympathy for advance malignancy	Good to know Most Know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam
Stomach and duodenum	**Cognitive:** • Gross/microscopic anatomy, physiology and pathology. • Peptic ulcer disease • Benign and malignant conditions • Gastric and duodenal perforation • How to investigate in stomach and duodenal pathology • Treatment of peptic ulcer and its complications • Presentation and treatment of gastric cancer **Psychomotor:**	Good to Know Must to Know		

	• Detail general and abdominal examination **Affective:** • Discuss the surgical options with the patient, counselling about the surgical outcome and taking consent			
Bariatic surgery	**Cognitive:** • How to treat obesity as a disease? • Patient selection and NICE guidelines • Surgical options to treat obesity • Follow-up, nutritional supplements and biochemical monitoring **Psychomotor:** • How to assess perioperative and treat perioperative complications **Affective:** • Rationale for surgery and the concept of metabolic surgery • Counselling about the surgery for obesity and future consequences	Good to Know Must Know		

Topic	Learning Objectives	Importance	Teaching Method	Assessment
MODULE 03				
Arterial Disorders	**Cognitive:** • The nature and associated features of occlusive peripheral arterial disease • The investigation and treatment options for occlusive peripheral arterial disease • How to diagnose and treatment options for acute and chronic limb ischemia • The arteritides and vasospastic disorders	Good to know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam

	Psychomotor: • Conservative management of acute limb ischemia (heparin) • How to examine the case of limb ischemia **Affective:** • Counselling and consent in case of limb amputation • Counselling to prevent vasospastic disorders	Must Know		
Venous Disorders	**Cognitive:** • Venous anatomy and physiology • The pathophysiology of venous hypertension • The clinical significance and management of superficial venous reflux **Psychomotor:** • The management of venous ulceration (dressings) • Venous thromboembolism • Lower limb examination for venous insufficiency **Affective:** Counselling about the life style or occupational modification to prevent venous disease	Good to Know Must to Know		
Lymphatic Disorders	**Cognitive:** • The anatomy and physiology of the lymphatic system • The etiology and classification of lymphoedema • The clinical features and management of lymphoedema **Psychomotor:** • Examination of lymphedema • Management of lymphedema • Manual lymph drainage exercises **Affective:** • Counselling about the limb care and guide about manual drainage	Good to Know Must Know		

Surgical Unit II

Lectures of Surgical Unit II are as under;

No. of lectures	Topic covered
	Module 4: Trauma
1.	Shock, Haemorrhage, Metabolic injury
2.	Blood transfusion
3.	Patient care and safety
	Module 5 : Hepato biliary
4.	Biliary system, Minimal invasive surgery
5.	Liver spleen
6.	Pancreas
	Module 6: Abdominal hernia and inguino scrotal swelling
7.	Abdominal wall hernias
8.	Testis and scrotum
9.	Day care surgery

Tutorials of Surgical Unit II are as under;

No. of Tutorials	Topic covered
	Module 4: Trauma
1.	Shock
2.	Haemorrhage, Metabolic injury
3.	Blood Transfusion
4.	Patient care
	Module 5 : Hepato biliary
5.	Biliary system
6.	Continue Biliary system ,Minimal invasive surgery
7.	Liver, Spleen
8.	Pancreas
	Module 6: Abdominal hernia and inguino scrotal swelling
9.	Abdominal wall hernias
10.	Inguinal hernias, Femoral hernia
11.	Testis and scrotum (Hydrocele, testicular torsion, undescended testis, varicocele,)
12.	Testicular tumor, Day care surgery

Learning Objectives of each Module with specific topics are as under;

Topic	Learning objectives	Importance	Teaching method	Assessment
MODULE 04				
Trauma	**Cognitive** • Describe the principles of trauma care. • Discuss Advanced Trauma Life Support (ATLS) guidelines. • Identify indications for diagnostic imaging in trauma (e.g., X-ray, CT, FAST). • Discuss the management of specific traumatic injuries (e.g., head injury, chest trauma, abdominal trauma). **Psychomotor** • Perform rapid trauma assessments using primary and secondary survey frameworks. • Demonstrate airway protection techniques including chin lift, jaw thrust. • Apply a pelvic binder for stabilization of pelvic fractures. • Perform needle thoracotomy for tension pneumothorax. **Affective** • Demonstrate empathy and professionalism when dealing with trauma victims and their families.	**Must know**	Lecture, Tutorial, CBL Clinical rotation, Skill lab Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OCSE
Shock, Hemorrhage, Metabolic response to injury	**Cognitive** • Explain classification and mechanisms of shock. • Explain pathophysiology of distributive shock (hypo volumic shock) and its management • Classify the types of bleeding and describe the stages of hemorrhagic shock. • Describe metabolic response to injury. **Psychomotor** • Establish intravenous access and initiate fluid resuscitation for patients in shock. • Demonstrate methods of controlling bleeding, including direct pressure,	**Must know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation	MCQs, SEQs OSCE, Direct observation

	tourniquets, and packing of wound and suturing **Affective** • Demonstrate professionalism , empathy and effective communication when interacting with patients in critical condition and their families		Role play, group discussion	Feedback, OSCE
Transfusion, patient safety	**Cognitive** • Describe indications, contraindications, and complications of blood transfusion. • Discuss the preparation, storage, and matching of blood and blood products. • Explain the management of transfusion reactions. • Explain infection prevention principles, including aseptic and sterile techniques. • Discuss patient safety protocols such as the surgical safety checklist and timeout procedures. **Psychomotor** • Demonstrate appropriate techniques for blood sample collection, cross-matching, and safe administration of blood transfusions. • Apply infection control measures, including hand hygiene and correct use of personal protective equipment. • Use WHO Surgical Safety Checklist effectively in simulated or real scenarios **Affective** • Promotes patient safety and adherence to principles effective transfusion practice.	**Must Know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE
MODULE 05				
Biliary system and minimal invasive surgery	**Cognitive** • Describe anatomy and pathophysiology of biliary system. • Identify common biliary tract diseases. • Correlate clinical findings, biochemical tests and diagnostic imaging (e.g., ultrasound, CT) to plan the management of biliary tract disease • Outline the principles and advantages of minimally invasive surgery (MIS),	**Must Know**	Lecture Tutorial Group discussion	MCQs, SAQs, Presentation OSCE, Direct observation

	including its application in gallbladder surgery. • Explain indications, contraindications, and complications of laparoscopic cholecystectomy. • Describe preparation, patient positioning, and equipment used in laparoscopic cholecystectomy. • Describe the steps of laparoscopic cholecystectomy and common troubleshooting techniques during the procedure. **Psychomotor** • Perform relevant history. • Perform abdominal examination focusing on signs of biliary disease, such as Murphy's sign or jaundice. • Identify laparoscopic instruments. **Affective** • Display professional behavior, team work skills and communication skills		Skill lab, Clinical rotation Role play, group discussion	Feedback, OSCE
Liver, Spleen	**Cognitive** • Explain anatomy and functions of liver and spleen. • Identify common liver diseases, including abscess, cysts, tumor. • Discuss indications, techniques, and complications of surgical procedures like liver resection and drainage of abscesses • List common splenic diseases requiring surgery (e.g., , trauma, hypersplenism, splenic abscess). • Discuss indications, contraindications, and complications of splenectomy. • Correlate clinical findings, biochemical and diagnostic imaging (e.g., ultrasound, CT) to plan the management of liver and splenic conditions. • Understand the prophylactic measures following splenectomy, including vaccination and infection prevention. **Psychomotor** • Take relevant history.	**Must Know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

	• Palpate and percuss the liver to identify hepatomegaly or other abnormalities. **Affective** Display professional behavior, team work skills and communication skills.			
Pancreas	**Cognitive** • Explain anatomy and functions of the pancreas. • Describe etiology, clinical features, and management of common pancreatic disorders, such as acute and chronic pancreatitis, pancreatic pseudo-cysts, and pancreatic tumors. • Understand indications, techniques, and complications of surgical interventions • Discuss the principles of post-operative care, including enzyme supplementation and glucose management. **Psychomotor** • Take relevant history of pancreatic disorders • Perform clinical examination and identify key signs of pancreatic pathology, such as Cullen's and Grey Turner's signs. **Affective** • Display professionalism while evaluating patient with pancreatic diseases	**Must know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE
MODULE 06				
Abdominal wall hernia	**Cognitive** • Describe anatomy of abdominal wall, and potential hernia sites (inguinal, femoral, umbilical, incisional, etc.). • Explain pathophysiology and classifications of hernias. • Identify clinical features of hernias, including pain, swelling, and complications. • Describe diagnostic modalities. • Outline the principles of hernia management.	**Must know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

	• Explain surgical techniques for hernia repair, including open and laparoscopic approaches • Explain the complications of hernia repair. **Psychomotor** • Perform history and clinical examination to diagnose and classify abdominal wall hernias. **Affective** • Demonstrate professionalism when counseling patients regarding treatment options and potential complications		Role play, group discussion	
Testis , Scrotum	**Cognitive** • Describe the anatomy of scrotum and its contents, including the testis, epididymis, and spermatic cord. • Understand the physiological functions of the testis.. • Describe etiology, clinical features, and complications of common scrotal and testicular disorders, including: o Hydrocele o Varicocele o Epididymitis and orchitis o Testicular torsion o Testicular tumors o Scrotal trauma o Inguinoscrotal hernias. • Differentiate between acute and chronic scrotal swellings based on clinical evaluation. • Explain the use of diagnostic tools such as: • Outline the surgical and non-surgical management of testicular and scrotal disorders. • Describe complications of different surgical procedures of scrotal and testicular disorder. • Discuss postoperative care. **Psychomotor** • Perform history and clinical examination of the scrotum and testis to identify condition.	**Must Know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

	• Demonstrate proper technique for bedside diagnostic maneuvers. **Affective** • Counsel patients and families effectively on treatment options, potential complications, and prognosis. • Maintain patient dignity and privacy during examination and management.			
Day care surgery	**Cognitive** • Define day care surgery and its significance in modern healthcare systems. • Explain the criteria of patient selection for day care surgery. • Identify surgical procedures commonly performed in day care settings. • Describe discharge criteria and instructions for home care and follow-up. • Discuss the benefits of day care surgery. **Psychomotor** • Conduct preoperative assessment for patients undergoing day care surgery **Affective** • Demonstrate empathy and professionalism when explaining the day care surgical process to patients and families.	**Nice to know**	Lecture Tutorial Group discussion Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

Surgical Unit III

Lectures of Surgical Unit III are as under;

No. of lectures	Topic covered
	Module 7: Wound and its management
1	Wound and its management, Tissue engineering and regeneration
2	Surgical infections
3	Tropical infestations
	Module 8: small bowel and its related disorders
4	Small intestine and inflammatory bowel disease
5	Intestinal Obstruction
6	Peritoneum and Mesentery
	Module 9: Large bowel and Anal canal
7	Appendix
8	Large Bowel
19	Rectum
10	Anal Canal

Schedule of tutorials of Surgical Unit III are as under;

No. of Tutorials	Topic covered
	Module 7: Wound and its management
1	Wound and its management
2	Surgical infections
3	Tropical infestations
4	, Tissue engineering and regeneration **on Friday**
	Module 8: small bowel and its related disorders
5	Small intestine
6	Intestinal Obstruction
7	Peritoneum and Mesentery
8	Inflammatory bowel disease **On Friday**
	Module 9: Large bowel and Anal canal
9	Appendix
10	Large Bowel
11	Rectum
12	Anal Canal

Learning Objectives of each Module with specific topics are as under;

Topic	Learning Objectives	Importance	Teaching Method	Assessment
MODULE 07				
Wound and its management	**Cognitive** • Normal wound healing and identify factors that adversely affects wound healing • Classification of wounds and types of healing • Principles of wound and scar management **Psychomotor:** • Identification and management of infected wound. • Application of different types of dressing **Affective:** • Patient's care with chronic wounds specially in geriatric and critically ill patients.	Good to know Must Know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam
Surgical infections	**Cognitive:**	Good to Know		

	• Common surgical pathogens and their sensitivities. • Clinical presentation of surgical infections. • Principles of antibiotic therapy, their misuse and development of resistance. • Koch's postulates • Surviving sepsis campaign, sepsis bundles and sepsis six • Concept of primary and secondary closure of wounds. • Host response in surgical infections • Definitions of infection, particularly at surgical sites **Psychomotor:** • Practice different aseptic techniques • Management of abscesses **Affective:**			
Tropical infestations	**Cognitive:** • common surgical infections and infestations that occur in the tropics. • Emergency presentations of patient. • Diagnosis, investigations and treatment of emergency conditions. • The multidisciplinary approach between surgeon, physician, radiologist, pathologist and microbiologist. **Psychomotor:** • General and local (lump, ulcers, abdomen, chest) examination of the patient **Affective:** • Effectively communicate and explain the causes	Good to Know Must Know		

	tropical infestations and guide the patients who are travelling to or coming from the areas, where tropical infestations are common			
Tissue engineering and regeneration	**Cognitive:** • Value and limitations of tissue diagnosis. • Approach of tissue processing and principles of microscopic diagnosis. • Features of neoplasia and its clinic-pathological correlation. • Role of immunohistochemistry and molecular pathology. **Psychomotor:** • General physical examination of cancer patients • Examination of malignant lumps or ulcers **Affective:** • Show sympathy towards cancer patients, especially in terminal illness. • Explain the course of disease to the patients. • Counselling/consent taking for tissue diagnosis and its importance.			

Topic	**Learning Objectives**	**Importance**	**Teaching Method**	**Assessment**
MODULE 08				
Small intestine	**Cognitive:** • Basic anatomy and physiology of small intestine • Aetiology and pathology of common intestinal conditions • The sign/symptoms, investigations and	Good to know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam

	management of intestinal problems • Principles of small intestinal surgery • Non- surgical management of intestinal problems **Psychomotor:** • Abdominal examination • ileostomy care **Affective:** • Counselling/consent in complex intestinal surgery (stoma formation, re-exploration)	Most Know		
Intestinal Obstruction	**Cognitive:** • Common causes of intestinal obstruction • History, diagnosis and principles of management • Interpretations of radiological findings • Surgical options and complications in gut resections **Psychomotor:** • Abdominal examination • Clinical signs **Affective:** • Able to explain to the patients about risk VS benefit of surgery • Counsel about stoma care and diet modification	Good to Know Must to Know		
Peritoneum and Mesentery	**Cognitive:** • The development and anatomy of the mesentery and peritoneum • Surgical conditions of the peritoneum, mesentery, greater omentum and retroperitoneal space **Psychomotor:** • Abdominal examination &GPE **Affective:**	Good to Know Must Know		

Inflammatory bowel disease	**Cognitive:** • Etiology and pathology of inflammatory bowel disease • Distinguishing features of ulcerative colitis and Crohn's disease • Extra-intestinal manifestations in inflammatory bowel disease • Principles of medical management • Emergency and elective surgeries in inflammatory bowel disease • Postoperative complications and outcomes in long term **Psychomotor:** • GPE and abdominal examination • Examination of extra intestinal manifestations **Affective:** • Counselling about the long-term complications • Counselling about the diet and lifestyle modifications • Counsel the patients to accept the condition and to live with it			

Topic	Learning Objectives	Importance	Teaching Method	Assessment
MODULE 08				
Appendix	**Cognitive:** • Surgical anatomy, clinical signs and differential diagnosis of appendicitis • The basic investigations in appendicitis • Open and laparoscopic appendicitis • Tumor of appendix and pseudomyxoma peritonei **Psychomotor:**	Good to know Must Know	Lecture / Demonstration, SGD, Practical, CBL/ PBL	SBQs & OSVE, OSCE, Clinical Exam

	• History to exclude differentials • Elicit clinical signs in appendicitis **Affective:**			
Large Bowel	**Cognitive:** • Anatomy and physiology of large bowel • Etiology and pathology of large bowel conditions • Principles of investigations of large bowel symptoms • Principles of colonic surgery • Management of emergency and elective surgical problem of large intestine • Different type of stoma in large bowel **Psychomotor:** • History of bleeding PR • Digital rectal examination and proctoscopy • Abdominal examination • Demonstrate stoma care **Affective:** • Counselling in the denial phase when disclosing malignant conditions • Consent taking for stoma	Good to Know Must to Know		
Rectum	**Cognitive:** • Anatomy and pathology of the rectum • Clinical presentation, investigations and treatment of the bening disease affecting the rectum • Carcinoma of the rectum, its presentation, surgery and postoperative care **Psychomotor:** • History of bleeding PR • DRE • Proctoscopy • Abdominal examination **Affective:** • Stoma consent/counselling	Good to Know Must Know		

Anal Canal	**Cognitive:** • The anatomy and physiology of the anal canal • Clinical presentation, investigations and differential diagnosis in anal canal pathology • Management of benign and malignant anal canal conditions **Psychomotor:** • DRE and proctoscopy **Affective:**			

Surgical Unit IV

Schedule Lectures of Surgical Unit IV are as under;

No. of lectures	Topic covered
	Module 10: Basic principles of Surgery
1	Basic surgical skills
2	Tissue diagnosis and molecular diagnosis
3	Transplant Global health and surgery
	Module 11: Neck swelling and adrenal
4	Thyroid
5	Extra thyroidal neck swelling
6	Parathyroid, Adrenals
	Module 12: Breast and its related disorders
7	Benign breast disease
8	Ca breast
19	Surgical oncology
10	Audit and ethics

Schedule of tutorials of Surgical Unit IV are as under;

No: of tutorials	Topic covered
	Module 10: Basic principles of Surgery
1.	Basic Surgical skills
2.	Diagnostic imaging, Tissue and molecular diagnosis
3.	Global Health and Surgery
4.	Transplantation
	Module 11 : Neck swelling and adrenal
5.	Thyroid
6.	Extra thyroidal neck swelling
7.	Parathyroid
8.	Adrenals
	Module 12: Breast and its related disorders
9.	Benign Breast diseases
10.	Ca Breast
11.	Surgical oncology
12.	Audit and ethics

Learning Objectives of each Module with specific topics are as under;

Topic	Learning objectives	Importance	Teaching method	Assessment
MODULE 10				
Basic surgical skills	**Cognitive** • Describe principles of asepsis, antisepsis, and sterilization. • Explain steps of basic surgical techniques (incision, suturing, and knot-tying). • Explain the uses of surgical instruments. **Psychomotor** • Demonstrate proper hand hygiene and sterile gowning/gloving techniques. • Perform basic suturing, wound closure, and knot-tying under supervision. • Identify instruments and handle instruments with safety. **Affective** • Demonstrate adherence with protocols in maintaining sterile fields. • Display commitment to practicing surgical skills with care.	**Must know**	Lecture, Videos Tutorial, CBL Clinical rotation, Skill lab Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OCSE
Diagnostic imaging, Tissue and molecular diagnosis	**Cognitive** • Describe indications, advantages, and limitations of imaging modalities like X-ray, CT, MRI, and ultrasound in surgical practice. • Describe the principles of histopathological and cytological diagnosis. • Explain the role of molecular techniques in identifying malignancies and genetic disorders. **Psychomotor** • Interpret basic diagnostic images for common surgical conditions	**Good to know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation	MCQs, SEQs OSCE, Direct observation

	• Use imaging findings to correlate with clinical features. • Assist in obtaining tissue samples for biopsy. • Handle tissue specimens properly for pathological evaluation. **Affective** • Appreciate the role of diagnostic imaging. • Demonstrate sensitivity when discussing biopsy results with patients. • Appreciate the t importance of timely and accurate diagnosis.		Role play, group discussion	Feedback, OSCE
Global Health and Surgery, Transplantation	**Cognitive** • Categorize global disparities in surgical care. • Explain the impact of resource limitations on surgical outcomes in low-income countries. • Describe the principles of organ allocation and recipient selection. • Explain the immunological basis of transplantation and rejection. • Knows ethical principles of organ transplantation. **Psychomotor** • Participate in case discussions on global surgical challenges. • Develop strategies for optimizing surgical care in resource-limited settings. **Affective** • Show empathy towards underserved populations. • Advocate for equitable surgical care globally. • Respect ethical principles of organ transplantation.	**Nice to Know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

MODULE 11				
Thyroid	**Cognitive** • Describe the anatomy, physiology, and pathology of the thyroid gland. • Identify clinical features and diagnostic approaches for goiter, hyperthyroidism, and thyroid malignancies. **Psychomotor** • Take relevant history. • Perform thyroid examination. • Interpretate laboratory investigation and correlate with clinical features. **Affective** • Show empathy towards patients with thyroid disorders, particularly those with malignancy. • Acknowledge the importance of lifelong follow-up in thyroid patients.	**Must Know**	Lecture Tutorial Group discussion Skill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE
Extra thyroidal neck swellings	**Cognitive** • Classify neck swellings based on anatomical location and etiology. • Describe clinical features of different neck swelling • Describe the diagnostic approach for cystic, inflammatory, and neoplastic swellings. **Psychomotor** • Take relevant history. • Perform examination of cervical lymph nodes. • Assist in biopsy procedures for lymphadenopathy. **Affective** • Display professional behavior and show respect for patient concerns and fears about malignancy.	**Must Know**	Lecture Tutorial Group discussion **S**kill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE

	• Advocate for timely intervention and care.			
Parathyroid and adrenals	**Cognitive** • Explain the physiology of calcium metabolism and parathyroid function. • Identify clinical features of hyperparathyroidism and hypoparathyroidism. • Explain the anatomy, physiology, and pathology of the adrenal glands. • Recognize clinical presentations of adrenal hyper-function and hypo-function. • Identify of surgical intervention for parathyroid and adrenal disorders. **Psychomotor** • Take relevant history • Perform clinical examination and identify key signs. • Advise relevant investigations • Interpret laboratory investigation and correlate with clinical presentation **Affective** • Display professionalism while evaluating patient. • Demonstrate sensitivity when counseling patients with hormonal imbalances. • Acknowledge the importance of lifelong monitoring in adrenal disorders.	**Good to know**	Lecture Tutorial Group discussion **S**kill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE
MODULE 12				
Breast	**Cognitive** • Describe the anatomy and physiology of breast. • Describe the clinical features, diagnosis, and management of benign and malignant breast conditions.	**Must know**	Lecture Tutorial Group discussion	MCQs, SAQs, Presentation

	• Explain screening methods for breast cancer **Psychomotor** • Perform history and clinical examination to diagnose breast • Assist in procedures such as FNAC, core biopsy, excision biopsy **Affective** • Respect patient privacy during breast examinations • Demonstrate empathy when addressing patient concerns for breast cancer. • Demonstrate professionalism when counseling patients regarding treatment options and potential complications.		Skill lab, Clinical rotation Role play, group discussion	OSCE, Direct observation Feedback, OSCE
Surgical oncology	**Cognitive** • Explain the principles of staging, diagnosis, and treatment of common cancers. • Describe the role of surgery in multimodal cancer treatment **Psychomotor** • Assist in biopsy and surgical procedures for tumor excision. • Participate in MDT discussions for cancer cases. **Affective** • Demonstrate compassion towards cancer patients and their families. • Advocate for early detection and prevention strategies.	**Nice to Know**	Lecture Tutorial Group discussion **S**kill lab, Clinical rotation Role play, group discussion	MCQs, SAQs, Presentation OSCE, Direct observation Feedback, OSCE
Audit and ethics	**Cognitive** • Explain the principles of clinical audit in improving surgical outcomes.	**Nice to know**	Lecture Tutorial Group discussion	MCQs, SAQs, Presentation

	• Discuss ethical issues related to informed consent, end-of-life care, and resource allocation. **Psychomotor** • Participate in data collection for audits. • Present audit findings in group discussions. **Affective** • Uphold ethical principles in all surgical practices. • Advocate for patient-centered care and shared decision-making		Clinical rotation Role play, group discussion	OSCE, Direct observation Feedback, OSCE

Updated Time Table for Final year MBBS (Academic Year 2024-2025)

Curriculum: Integrated Modular Curriculum for Liaquat University Medical & Health Sciences and its constituent and affiliated colleges

Time	Mon	Tues	Wed	Thurs	Fri
8.15 to 9.00	**Lecture SU I**	**Lecture SU II**	**Lecture SU IIII**	**Lecture SU IV**	**CPC after every module**
9.00 AM to 10.00 AM	Tutorials on Same topic of lecture in all units via Case based discussion, Skill lab or via simulated patient	Tutorials on Same topic of lecture in all units via Case based discussion, Skill lab or via simulated patient	Tutorials on Same topic of lecture in all units via Case based discussion, Skill lab or via simulated patient	Tutorials on Same topic of lecture in all units via Case based discussion, Skill lab or via simulated patient	Skill lab learning
10.00 to 12.00	Attending ward rounds or OT	Attending ward rounds or OT	Attending ward rounds or OT	Attending ward rounds or OT	Attending ward rounds, OT
12.00 to 2.00 pm	Discussion on specific topic of clinical interest as per allotment to individual units	Discussion on specific topic of clinical interest as per allotment to individual units	Discussion on specific topic of clinical interest as per allotment to individual units, long case or short case discussion	Discussion on specific topic of clinical interest as per allotment to individual units	Discussion on specific topic of clinical interest as per allotment to individual units
2.00 to 4,00 pm	Individual History and exam by subgroups as per allotted beds	Individual History and exam by subgroups as per allotted beds	Individual History and exam by subgroups as per allotted beds	Individual History and exam by subgroups as per allotted beds	Individual History and exam by subgroups as per allotted beds

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF
OBSTETRICS & GYNAECOLOGY

ACADEMIC SESSION 2024-25

FACULTY OF OBSTETRICS & GYNAECOLOGY

CHAIRPERSON – OBGYN, LUMHS
1. Prof. Dr. Naheed Parveen Shaikh
PROFESSOR
2. Prof. Nusrat Nisar
3. Prof. Najma Bano Shaikh
4. Prof. Shazia Rani
5. Prof. Shehla Raza Channa
ASSOCIATE PROFESSOR
6. Dr. Nabila Hassan
7. Dr. Fehmida Parveen
8. Dr. Sabreena Abbas
9. Dr. Anila Mahmood
10. Dr. Shazia Awan
11. Dr. Erum Samreen Siddiqui
12. Dr. Madiha Abbasi
ASSISTANT PROFESSOR
13. Dr. Majida Khan
14. Dr. Farah Naz
15. Dr. Saima Ghaffar
16. Dr. Saira Dars
17. Dr. Ambreen Mughal
18. Dr. Qurat ul Ain
19. Dr. Ambreen Ghouri
20. Dr. Samia Aijaz
SENIOR REGISTRAR (OBGYN)
21. Dr. Samina Shaikh
22. Dr. Nazia Memon

ACKNOWLEDGEMENT

This Curriculum/ study giude is designed as per needs of the Final Professional MBBS Students (05th Year) in the Department of Obstetrics & Gynaecology, Liaquat University of Medical & Health Sciences, Jamshoro-Pakistan.

I would like to acknowledge the contribution of my team of the Department of Obstetrics and Gynaecology as this work would not have been possible without the combined efforts of every one including the nonacademic staff

I hope the young students/doctors will find this Curriculum/ study guide helpful in learning of essential obstetrical & gynecological management and skills.

Prof. Dr. Naheed Parveen Shaikh
Chairperson
Department of Obstetrics &Gynaecology
Liaquat University of Medical &
Health Sciences, Jamshoro

MISSION

The Liaquat University Undergraduate Curriculum in Obstetrics & Gynaecology is designed to provide medical students with the relevant competencies needed to practice as a Foundation Year Doctors.

The curriculum is aimed to provide comprehensive coverage of the subject area. It provides the opportunity to explore women health related problems and its cure, it also involves women who are not ill and the students is able to learn that not all medicine is proposed at curing disease.

This curriculum is designed for the students with quality medical education that groom their personality and inculate in them sense of responsibility, confidence, commitment and dedication toward their profession, society and country.

It explores the avenues of knowledge and skill necessary to practice O&G in the community as well as provide excellent opportunities to appreciate professional behavior.

This curriculum will facilitate the students to become better doctors of the future.

Prof. Dr. Naheed Parveen Shaikh
Chairperson
Department of Obstetrics & Gynaecology
Liaquat University of Medical &
Health Sciences, Jamshoro

RATIONALE

The purpose of study guide is to facilitate students learning by providing an outline of modules, teaching methods, assessment process and evaluation strategies in context to their themes required to achieve the exit competencies in the field of Obstetrics & Gynaecology. This module will enable students to appropriately evaluate, diagnose, treat and manage a broad spectrum of common problems related with Obstetrics & Gynaecology.

In this guide the details of teaching schedule and assigned faculty members for each module whom the students can contact any time for guidance or queries are also mentioned.

RULES AND REGULATIONS

1) Daily timings & posting of Obstetrics & Gynaecology is 8:30 to 3:00 pm, biometric (digital) and manual attendance both will be taken into account for this purpose.
2) All students are advised to wear white apron during ward posting (Mandatory).
3) 80% attendance is mandatory during ward posting become eligible for ward test.
4) After 9.00 a.m. Students are considered to be late and three (03) late coming will be count as one (01) absent.
5) Evening calls will be assigned in groups for 2 hours (as per clinical posting/schedule) 3 to 5 pm as per their residence and availability conveyance facility.
6) Bed allotment of students will be done and all students are supposed to follow their patients accordingly.
7) Formative assessment in form of end modular test/ TBL and WBA (Mini-Cex) will be taken multiple times throughout the rotation while summative assessment will be arrange for last 2-3 days of rotation (clinical examination & OSCE).
8) OPD timing will be strictly followed from 11.00am to 1.30pm on respected days Except Friday timings of 11.00 to 1.00pm as per the task of the day whether outdoor or indoor.
9) Students skipping ward test unnecessary will not be allowed for ward test with any other group.

PROGRAM

The Final Professional MBBS (Obstetrics & Gynecology) Clinical Posting comprises of Eight (08) Weeks (02 Weeks per Unit)

1. Eight weeks (08) total 300 hours
    - **a.** 5 days per week (Monday - Friday)
    - **b.** 7:30 hours per day (08:00am – 03:00pm)
    - **c.** Evening Posting (03:00pm – 5:00pm) as per schedule

LEARNING OBJECTIVE & OUTCOMES

1) Learning Objective

To equip the students with essential knowledge, skills and attitude in order to enable them with following:

- **a.** Take appropriate history of Obstetrical & Gynaecological diseases; communicate effectively with the patient, family and the community.

b. Demonstrate the skill of General physical, systemic and abdominal examination can auscultate the fetal heart sounds, that reflects their clinical presentation.

c. Formulate the problem list, a differential diagnosis. A safe and patient centered approach should be used for the diagnosis of major problems encountered in Obstetrics & Gynaecology.

d. Select the most appropriate investigations relevant to each of the presenting clinical scenarios with justification.

e. Develop a management plan for each problem on the problems list and learn to identify, manage critical and acute clinical cases in Obstetrics & Gynaecology.

f. Demonstrate proficiency in specific procedural skills in Obstetrics & Gynaecology.

g. Demonstrate collaboration with other team members, as a part of multi-disciplinary approach in carrying for patients and work as team in solving clinical problems as Case Based Learning (CBLs) during their rotation.

h. Able to demonstrate Professionalism. Professional behavior like punctuality, regularity, respectable and professional dressing, wearing a white coat and demonstration of respect and courtesy towards patients and classmates.

i. Ensure patient safety: The student should be aware and practice the principles of patient's safety, as understanding and learning from errors, engaging with patient and caregivers, practicing infection control and improving medication safety.

j. Understand the prevalence and prevention of the common public health problems related to O&G in the community.

k. Understand the principles of medical research and fundamentals of information Technology.

l. Identify and access information / resources on evidence-based Obstetrics &Gynecology practice.

2) Learning Outcomes

By the end of this module, MBBS students will be able to perform

a. Cognitive Domain (Knowledge):

b. Skill Domain (Application):

c. Affective Domain (Attitudes and Professionalism):

<u>THEMES</u>

a) Obstetrics

1) Basic Clinical Skills

2) Physiology of Pregnancy

3) Anatomy of Fetal Skull and Maternal Bony Pelvis

4) Normal Pregnancy

5) High Risk Pregnancy
6) Miscellaneous Medical Disorders in Pregnancy
7) Perinatal Infections
8) Abnormal Pregnancy
9) Normal Labor
10) Abnormal Labor
11) Puerperium
12) New Born Care
13) Ethics in Obstetrics Practice

b) Gynaecology

14) Basic Clinical Skills
15) Sub Fertility and Early Pregnancy Loss
16) Sexual and Reproductive Health
17) Urogynaecology and Pelvic Floor Problems
18) Gynecological Oncology
19) Common Gynecological Operations
20) Ethics and Medico Legal Aspects of Gynecology

TEACHING STRATEGIES

1) Morning Tutorials
2) interactive lectures
3) Bedside clinical teaching
4) Flipped classrooms
5) Problems based learning
6) Tutorial / Practical sessions / essential skills in lab practice
7) Labor room and operation theater rotation
8) ward rounds, bed presentations
9) outpatient-based teaching
10) Assignments/ self studies
11) CPC organized by OBGYN department
12) Seminars, Clinical Pathological Conference, using modern audio visual technique, distant learning using electronic devices and current Information Technology facilities,
13) Journal club
14) Research projects
15) The subject is distributed in 20 modules (13 for Obstetrics and 07 for Gynaecology)

* *It is mandatory for the institute to provide necessary teaching aids and training facilities to implement the methodology.*

5th YEAR CLINICAL TEACHING SCHEDULE (8:30 am to 5:00 pm)

Morning Orientation of topic and discussion with whole groups

TIME	ACTIVITY
8:30 to 9:30am	Introduction of the task by lead facilitator and brief description / demonstration on the topic, interactive discussion.
9:30 to 11:00am	Bed side teaching ward round 9:30 bed allocation, presentation along with postgraduates
11:00 to 1:30pm	Students will be divided in 3 sub-group on OPD, L-Room & O.T.
1:30 to 2:00pm	Pray & Lunch Break
2:00 to 2:30pm	Clinic Work and log book Assessment
2:30 to 3:00pm	Reflection on the day activities, feed-back, self-directed learning next day
3:00 to 5:00pm	Twice evening duties (02hours) will be assigned on every ward posting. (As per Schedule)

THE LOG BOOK

The log book is a collection of evidence that learning has taken place. The students are expected to make a reflective record of his/her achievement by writing the histories, examinations of patients and the skills which they have performed during their rotation.

EVALUATION / ASSESSMENT

The internal assessment will contribute 20% of marks in the examination. It is intended to provide feedback to student and tutors

TOOL

a) MCQ's
b) OSPE

SUMMATIVE EVALUATION

Student evaluation will be done through theoretical evaluation

MCQ's (two papers) 200 Marks

Practical (OSPE) 160 Marks (10static Station of 8 marks each and 5 interactive stations of 16 marks each)

Internal assessment (20%) 40 Marks

Total 400 Marks

TEXT-BOOKS AND REFERENCES

1. Gynaecology by Ten Teacher 20th Edition
2. Obstetrics by Ten Teacher 20th Edition
3. Lifesaving skills manual, essential Obstetrics and New Born Care RCOG
4. Pregnancy, childbirth, postpartum and newborn care (PCPNC) A Guide for Essential Practice, Integrated Management of Pregnancy and Child Birth. Geneva: WHO 2003
5. Guideline for the management of reproductive tract infections: AAHUNG

OBSTETRICS

MODULE – 01

BASIC CLINICAL SKILLS

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to history taking, general physical and systemic examination, suggesting relevant investigations, appropriate procedural and communication skill in Obstetrics.

- Logical sequence of eliciting history from an obstetric patient
- Clinical examination
- Interpretation of investigations
- Effective verbal and non-verbal communication

MODULE – 02

PHYSIOLOGY OF PREGNANCY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills (Application) and attitudes in relation to physiology of pregnancy

Re-Call:

- Diagnosis of pregnancy
- Re-call: Conception, implantation, development of placenta, fetal circulation and abnormalities of placenta
- Physiological changes associated with pregnancy

MODULE – 03

ANATOMY OF FETAL SKULL AND MATERNAL BONY PELVIS

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation:

Re-Call:

- Anatomy of fetal skull and maternal bony pelvis
- Abnormalities of bony pelvis

MODULE – 04

NORMAL PREGNANCY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to antenatal care in low risk pregnancy and the appropriate modification to antenatal care:

- Pre-pregnancy care and antenatal care / Antenatal screening for diabetes
- Imaging in obstetrics
- Pre-natal diagnosis
- Essential drugs and immunization with dosage and estimated need for pregnancy, child birth and newborn

MODULE – 05

HIGH RISK PREGNANCY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to recognition of the high risk pregnancy and the appropriate modification to antenatal care:

- Identify a high risk pregnancy
- IUGR and fetal monitoring
- Prolonged pregnancy
- Multiple pregnancy
- Hyperemesis gravidarum
- Diabetes in pregnancy
- Hypertensive disorders of pregnancy
    - PIH
    - Pre-eclampsia
    - Eclampsia
    - Essential HTN
- Chronic renal diseases
- Cardiac diseases in pregnancy
- Liver diseases in pregnancy
- Hematological disorders of pregnancy
    - Anemia in pregnancy
    - ISO immunization
    - Thrombocytopenia and thrombophillias
    - Coagulation and fibrinolytic disorders

MODULE – 06

MISCELLANEOUS MEDICAL DISORDERS IN PREGNANCY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to the effect of pre-existing medical conditions on pregnancy and the effect of pregnancy on these conditions

- Epilepsy
- Migraine
- Thyroid diseases
- Respiratory disorders
- Auto immune disease

MODULE – 07

PERINATAL INFECTIONS

Learning Outcome:

By the end of this module students will be able to demonstrate an understanding of the etiology, risk factors for, risks and management of the perinatal infections:

- Syphilis
- Toxoplasmosis
- Cytomegalovirus

- Rubella
- Varicella zoster
- Malaria
- Urinary tract infection
- Bacterial infections
- Herpes simplex viral infections
- Chlamydia, Gonorrhea
- Trichomoniasis
- Genital warts
- HIV, Aids
- Hepatitis

MODULE – 08

ABNORMAL PREGNANCY

Learning Outcome:

By the end of this module students will be able to demonstrate an understanding of the etiology, risk factors for, risks and management of the major antenatal complications of pregnancy:

- Bleeding in early pregnancy (brief account of)
    - Abortion
    - Ectopic pregnancy
    - Gestational trophoblastic disease
- Bleeding in 2nd half of pregnancy
    - Ante partum hemorrhage
        - Placenta previa
        - Abruptio placentae
        - Vasa previa
- Intra uterine fetal death
- Polyhydroamnios / oligohydroamnios
- Mal-presentation and position
    - Breech presentation
    - Transverse lie and shoulder presentation
    - Face presentation
    - Brow presentation
- Cord prolapse

MODULE – 09

NORMAL LABOR

Learning Outcome:

By the end of this module students will be able to understand and demonstrate appropriate knowledge, skills and attitudes in relation to labour

- Normal Labor
    - Physiology
    - Mechanism
    - Diagnosis
    - Management of labor

- Structure and use of partograph
- Intra partum fetal monitoring
    - Fetal heart rate monitoring
    - Fetal scalp sampling
- Methods of induction and augmentation of labor
    - Indications
    - Contraindications
    - Complications
- Analgesia and anesthesia
- Management of 3rd stage of labor

MODULE – 10

ABNORMAL LABOR

Learning Outcome:

By the end of this module students will be able to understand and demonstrate appropriate knowledge, skills and attitudes in relation to abnormal labor:

- Awareness of complications and management
- Instrumental vaginal delivery
    - Forceps delivery
    - Ventouse delivery
- Episiotomy
- Perineal trauma
- Cesarean section
- Prolonged labour
    - Causes
    - Management
- Obstructed labour / ruptured uterus
    - Causes
    - Management
- Complications of 3rd stage of labour
- PPH (Primary & Secondary)
    - Causes
    - Management
- Uterine inversion
- Obstetrics shock and unconscious patient

MODULE – 11

PUERPERIUM

Learning Outcome:

By the end of this module students will be able to demonstrate an understanding of a normal and abnormal postpartum period

- Normal Puerperium
    - Physiological changes
- Abnormal Puerperium
    - Puerperal disorders
    - Puerperal pyrexia

- The breasts and breast disorders
- Contraception
- Maternal and Perinatal mortality

MODULE – 12

NEW BORN CARE

Learning Outcome:

By the end of this module students will be able to demonstrate an understanding of essential newborn care and common neonatal problems and their management:

- Essential newborn care
- Observe the immediate assessment, apgar score and resuscitation of newborn care
- Breast feeding and its importance
- Neonatal problems

MODULE – 13

ETHICS IN OBSTETRICS PRACTICE

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to ethics and legal issues in Obstetrics:

- Ethics and Legal issues in obstetrics

GYNAECOLOGY

MODULE – 14

BASIC CLINICAL SKILLS

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to history taking, examination, investigation and common gynecological problems in the community:

- Introduction, gynecological history taking
- Clinical examination by video
- Anatomy of female genital tract
- Development of female genital tract
- Puberty and adolescence
- Ovulation and its legal importance
- Physiology of menstrual cycle
- Menstrual disorders
- Abnormal menstruation
- Amenorrhea
    - Primary amenorrhea
    - Secondary amenorrhea
- Polycystic ovarian disease
- Hirsutism / virilism

MODULE – 15

SUB FERTILITY AND EARLY PREGNANCY LOSS

Learning Outcome:

By the end of this module students will be able to demonstrates a basic understanding of the common causes, investigations and management of sub-fertility and early pregnancy loss:

- Sub-fertility
- Early pregnancy loss
- Abortion
- Ectopic pregnancy
- Gestational trophoblastic disease
- Endometriosis and Adenomyosis

MODULE – 16

SEXUAL AND REPRODUCTIVE HEALTH

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to fertility control (Contraception and termination of pregnancy), the diagnosis and management of sexually transmitted infections (including HIV), Sexual dysfunction, menopause and HRT.

- Introducing the sexual history taking
- Contraception and sterilization
- Infections of female genital tract
- Management of lower abdominal pain
- Acute pelvic inflammatory disease (PID)
- Chronic PID
- Sexually transmitted infections (STIs) including HIV/AIDS
    - Screening
    - Management
    - Prevention of STIs
- Iatrogenic infections of female reproductive tract
- Reproductive tract infection in male
- Awareness of psycho sexual problems
- Vaginal discharge
- Menopause

MODULE – 17

UROGYNAECOLOGY AND PELVIC FLOOR PROBLEMS

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to incontinence and prolapse:

- Utero vaginal prolapse
- Urinary incontinence
    - Stress incontinence
    - Urge incontinence

- Urinary frequency
- Urinary tract infections
- Urinary fistulae

MODULE – 18

GYNECOLOGICAL ONCOLOGY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to Gynaecology Oncology:

- Conditions affecting vulva and vagina
    - Benign conditions of vulva
    - VIN and invasive vulval carcinoma
    - Benign conditions of vagina
    - VIAN and vaginal carcinoma
- Condition affecting cervix, uterus, ovarian and fallopian tubes
    - Benign conditions of cervix
    - CIN and invasive carcinoma of cervix
    - Benign conditions of uterus
    - Malignant disease of uterus
    - Benign tumor of ovaries
    - Cancer of ovaries
    - Cancer of fallopian tubes
- Chemotherapy for gynecological cancers and GTDs and radiotherapy

MODULE – 19

COMMON GYNECOLOGICAL OPERATIONS

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to common gynecological procedures, pre operative and post operative management:

- Common gynecological procedures
    - Hysteroscopy
    - Laparoscopy
    - Cystoscopy
    - Dilatation and curettage
    - Abdominal and vaginal hysterectomy
    - Myomectomy
- Pre operative preparations
- Post operative complications and its management

MODULE – 20

ETHICS AND MEDICO LEGAL ASPECTS OF GYNECOLOGY

Learning Outcome:

By the end of this module students will be able to understand and demonstrate adequate knowledge, skills and attitudes in relation to ethics and legal issues in Gynaecology:

- Litigation and consents
- Ethics and reproductive health

TOPIC DISTRIBUTION OF SYLLABUS (OBGYN)

GYNAE UNIT – I	GYNAE UNIT-II
Obstetrics: Module – 1 (Complete Topics) Module – 2 (Complete Topics) Module – 4 (Complete Topics) Module – 7 • Syphilis • Toxoplasmosis • Cytomegalovirus • Rubella ***Gynaecology:*** Module – 15 (Complete Topics) Module – 18 • Benign and Malignant Condition of Ovaries & Fallopian Tubes Module – 19 • Hysteroscopy • Laparoscopy • Staging Laparotomy	***Obstetrics:*** Module – 3 (Complete Topics) Module – 5 (Complete Topics) Module – 6 (Complete Topics) Module – 7 • Varicella zoster • Malaria • Urinary tract infection • Bacterial infections ***Gynaecology:*** Module – 14 (Complete Topics) Module – 17 (Complete Topics) Module – 18 • Benign and Malignant condition of Uterus Module – 19 • Dilatation & Curettage • ERPC Diagnostic • Cystoscopy • Vaginal Hysterectomy
GYNAE UNIT – III	**GYNAE UNIT – IV**
Obstetrics: Module – 7 • Herpes simplex viral infections • Chlamydia • Gonorrhea • Trichomoniasis Module – 8 (Complete Topics) Module – 9 (Complete Topics) Module – 10 (Complete Topics) ***Gynaecology:*** Module – 18 • Benign & Malignant Condition of Cervix Module – 19 • Abdominal Hystrectomy • Myomectomy Module – 20 (Complete Topics)	***Obstetrics:*** Module –7 • Genital warts • HIV, Aids • Hepatitis Module – 11 (Complete Topics) Module – 12 (Complete Topics) Module – 13 (Complete Topics) ***Gynaecology:*** Module – 16 (Complete Topics) Module – 18 • Benign & Malignant Condition of Vulva and Vagina Module – 19 • Pre-operative preparation • Post-operative complications and its management

2 WEEKS SCHEDULE OF HOSPITAL POSTING (BATCH 2020-21)

	Topic	8:30 to 9:30 am	9:30 to 11:00 am	11:00 to 1:30 pm	1:30 to 2:00 pm	2:00 to 2:30 pm	2:30 to 3:00 pm	3:00 to 5:00 pm
Day 1 Mon Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Evening Posting A + B
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)				Evening Posting A + B
Day – 2 Tues Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)				Evening Posting A + B
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)				Nil
Day – 3 Wed Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)				Nil
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)				Evening Posting A+B+C
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
Day – 4 Thurs Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OPD) Group – C (L-R) Group – A (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Evening Posting B + C
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OT) Group – A &C (Ward)				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OPD) Group – C (L-R) Group – A (Ward)				Evening Posting B + C

Day – 5 Fri Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OT) Group – A &C (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OPD) Group – C (L-R) Group – A (Ward)				Evening Posting B + C
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OT) Group – A &C (Ward)				Nil

2 WEEKS SCHEDULE OF HOSPITAL POSTING (BATCH 2020-21)

	Topic	**8:30 to 9:30am**	**9:30 to 11:00am**	**11:00 to 1:30pm**	**1:30 to 2:00 pm**	**2:00 to 2:30 pm**	**2:30 to 3:00 pm**	**3:00 to 5:00 pm**
Day – 6 Mon Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – C (OPD) Group – A (L-R) Group – B (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Evening Posting A + C
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – C (OT) Group – A & B (Ward)				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – C (OPD) Group – A (L-R) Group – B (Ward)				Evening Posting A + C
Day – 7 Tues Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – C (OPD) Group – A (L-R) Group – B (Ward)				Evening Posting A + C
	Gyn Unit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)				Nil
Day – 8 Wed Day	**Gyn Unit–1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit–2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B & C (OT) Group – A (Ward)				Nil
	GynUnit–3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – B (OPD) Group – C (L-R) Group – A (Ward)				Evening Posting A+B+C
	Gyn Unit–4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil

Day – 9 **Thurs Day**	**Gyn Unit– 1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit– 2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Research Work / Case Presentation/ PBL				Nil
	Gyn Unit– 3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OT) Group – B & C (Ward)				Nil
	Gyn Unit– 4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	Group – A (OPD) Group – B (L-R) Group – C (Ward)				Nil
Day – 10 **Fri Day**	**Gyn Unit– 1**	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec	**Assessment / Ward Test**	PRAY & LUNCH BREAK	CLINICAL WORK	REFLECTION & FEED BACK	Nil
	Gyn Unit– 2	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec					Nil
	Gyn Unit– 3	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec					Nil
	Gyn Unit– 4	Introduction of Topic & Brief Discussion	Bed Side Teaching & Clinical Skills / Lec					Nil

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF PAEDS SURGERY

DEPARTMENT OF CARDIOTHORACIC SURGERY

ACADEMIC SESSION 2024-25

DEPARTMENT OF PAEDS SURGERY

TEACHING FACULTY AND TOPICS

ASSISTANT PROFESSORS	
01	Dr. Mumtaz Ahmed Qureshi (INCHARGE)
02	Dr. Imtiaz Ahmed Qureshi

TOPICS	
1. Pyloric Stenosis	**6. Neonatal Intestinal Obstructions**
2. Anorectal malformations	**7. Umbilical Anomalies**
3. Gastro esophageal Reflux	**8. Congenital Lungs anomalies**
4. Hirschsprung's Disease	**9.** Tracheo-Esophageal Fistulas
5. Intussusceptions	**10. Kidney Tumors in Neonates And Infants**

Day	Time	Group A	Group B
Monday	9:00 AM - 11:00 AM	Pediatric Surgery Ward Teaching	Pediatric Surgery ICU
	11:00 AM - 2:00 PM	Operation Theatre (OT)	Classroom Teaching (ARM / HPS / GERD / Acute Abdomen)
Tuesday (Week 1,3)	9:00 AM - 11:00 AM	Pediatric Surgery ICU	Pediatric Surgery Ward Teaching
	11:00 AM - 2:00 PM	OPD Observation and Participation	Operation Theatre (OT)
Tuesday (Week 2,4)	9:00 AM - 11:00 AM	Pediatric Surgery Ward Teaching	Pediatric Surgery ICU
	11:00 AM - 2:00 PM	Operation Theatre (OT)	OPD Observation and Participation
Wednesday	9:00 AM - 11:00 AM	Pediatric Surgery Ward Teaching	Pediatric Surgery ICU
	11:00 AM - 2:00 PM	Classroom Teaching (ARM / HPS / GERD / Acute Abdomen)	Operation Theatre (OT)
Thursday (Week 1,3)	9:00 AM - 11:00 AM	Pediatric Surgery ICU	Pediatric Surgery Ward Teaching
	11:00 AM - 2:00 PM	Classroom Teaching (Intussusception / Abdominal Wall Defects)	Ward/ICU Teaching
Thursday (Week 2,4)	9:00 AM - 11:00 AM	Pediatric Surgery Ward Teaching	Pediatric Surgery ICU
	11:00 AM - 2:00 PM	Ward/ICU Teaching	Classroom Teaching (Intussusception / Abdominal Wall Defects)
Friday (Week 1,3)	9:00 AM - 11:00 AM	Pediatric Surgery ICU	Pediatric Surgery Ward Teaching
	11:00 AM - 12:00 PM	OPD Observation and Participation	Classroom Teaching (Hirschsprung's Disease / Umbilical Anomalies)
Friday (Week 2, 4)	9:00 AM - 11:00 AM	Pediatric Surgery Ward Teaching	Pediatric Surgery ICU
	11:00 AM - 12:00 PM	Classroom Teaching (Hirschsprung's Disease / Umbilical Anomalies)	OPD Observation and Participation

DEPARTMENT OF CARDIOTHORACIC SURGERY

TEACHING FACULTY AND TOPICS

TEACHING FACULTY	
S No.	NAME
01	**INCHARGE , ASSISTANT PROFESSOR AND TEACHER:** DR. KHALIL AHMED SHAIKH
S No.	**TOPICS**
01	Management of Blunt and Penetrating Chest Trauma
02	Surgical Management of Pneumothorax
03	Surgical Management of Empyema Thoracis with Broncho pleural Fistula
04	Surgical Management of Chest Wall Mass
05	Surgical Management of Post TB Bronchiectasis

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF

MEDICINE

ACADEMIC SESSION 2024-25

DEPARTMENT OF MEDICINE

S #	TEACHING FACULTY		
	PROFESSORS		
01	**CHAIRMAN:** Prof Muhammad Iqbal Shah	**03**	Prof. Abdul Haque Khan
02	Prof Imran Ali Shaikh	**04**	Prof. Santosh Kumar
	ASSOCIATE PROFESSORS	**08**	Dr. Muhammad Aslam Rind
05	Dr. Mumtaz Ali Lakho	**09**	Dr. Sheeba Faryal
06	Dr. Mona Humaira	**10**	Dr. Salma Kadir
07	Dr. Abdul Ghani Rahimon	**11**	Dr. Kanwal Abbas Bhatti
	ASSISTANT PROFESSORS		
12	Dr. Tariq Zafar Shaikh	**18**	Dr. Amjad Ali Kalhoro
13	Dr. Zulfiqar Ali Shah	**19**	Dr. Tara Chand Devrajani
14	Dr. Madiha Shah	**20**	Dr. Abdul Ghaffar Dars
15	Dr. Bedar Bakhat Khan	**21**	Dr. Razia Bano
16	Dr. Imran Karim	**22**	Dr. Maria Nazir
17	Dr. Shafaq Nazia	**23**	Dr. Kashifullah Shabeer
	SENIOR REGISTRARS		
24	Dr. Arshad Ali Lakho	**28**	Dr. Muhammad Sohail Baig
25	Dr. Sobhya Karamullah	**29**	Dr. Ghulam Mujtaba Shah
26	Dr. Akbar Gohar	**30**	Dr. Samar Raza
27	Dr. Abeer Memon	**31**	Dr. Kamran Ali Qureshi

Final year Syllabus for the Subject of Internal Medicine & Two Allied Subjects
Integrated modular curriculum

Integrated modular curriculum for the subject of Internal Medicine and two Allied Subjects to be covered in final year MBBS in Internal Medicine and allied i-e Pulmonology and Gastroenterology.

The syllabus of Internal Medicine Module in LUMHS will be taught in four units of department in a structured manner. Implementation of Allied I.e. Pulmonology and Gastroenterology will be executed by respective subspecialty departments in consultation with chairman of Internal Medicine department. While constituent and affiliated colleges will implement as per their feasibility and structure.

Integrated curriculum allows students to relate principles of anatomy, physiology, pathology, and pharmacology to clinical scenarios. This comprehensive framework not only enhances understanding, but also improves clinical reasoning, decision-making, and problem-solving skills. By incorporating active learning methods, such as case- based discussions, simulation exercises, and interdisciplinary teamwork, students are equipped to address comprehensive patient care.

Curriculum also emphasizes professionalism, ethical consideration, and effective communication, preparing students to provide empathetic, patient-centered care. It also promotes self-directed learning, required for thriving in a rapidly changing medical education. Thus, the integrated approach ensures that future doctors are competent, confident, and prepared to meet the challenges of healthcare delivery.

Rationale

Integrated curriculum in internal medicine and allied for undergraduates (Final year MBBS) is essential as this is the critical phase in preparing students for their roles as competent medical professional. By integrating anatomy, physiology, pathology, and radiology with clinical practice, students gain ability to correlate theoretical knowledge with real-life patient management. This approach enhances their diagnostic decision-making skills while preparing them to address complex clinical scenarios in a multidisciplinary healthcare setting. Additionally, integrating procedural skills and evidence-based medicine ensures that students are equipped for the need of medical practice, to deliver care in the community as a seven-star doctor defined by Pakistan Medical & Dental Council (PMDC)

Curriculum also emphasizes professionalism, ethical decision-making, and effective communication, which are critical components of patient-centered care. Teamwork and interdisciplinary collaboration exposure prepares students for real-world challenges, promoting holistic care. Curriculum not only enhances clinical competence but also instills lifelong learning habits. Ultimately, an integrated surgical curriculum ensures that graduating students are ready to transition into their roles as capable healthcare professionals.

RULES AND REGULATIONS

1. Daily timings for medicine posting is 8.15 to 3.00 pm
2. 75% of class attendance is mandatory to appear in end of rotation test.
3. After 9.00 a.m. Students are considered to be late and three late coming will be count as one absent.
4. Attendance of all the sessions will be mandatory for attendance of the day.
5. Bed allotment of students will be done and all students are supposed to follow their patients accordingly.
6. Formative assessment in form of end modular test/ TBL and WBA (Mini-Cex) will be taken multiple times throughout the rotation while summative assessment will be arranged for last 2-3 days of rotation (clinical examination & SBQs).

7. OPD timing will be strictly followed

PROGRAM

5th-year medicine posting comprises 12-weeks (2.5-weeks/ unit and one week in allied) of clinical rotation in department of medicine. Students go through the rotations in Gastroenterology and Pulmonology wards

TEACHING/LEARNING STRATEGY: During rotation, students will learn through

- Case-based learning
- Bedside clinical teaching sessions
- Flipped classrooms
- Seminars
- Role play/role modeling
- Outpatient-based teaching
- Interactive lectures
- working as a team with postgraduates and senior colleagues (house officers) During their evening postings, students also visit Emergency patients under the supervision of medicine residents and then follow the patients from admission till discharge.

Case base learning:

Students present the history and examination of a patient the then differential diagnosis, investigations and management is discussed in detail

Bedside teaching:

History taking, clinical examination, and counseling skills are taught and practiced at the bedside or at OPD as task of the day

Flipped Classroom:

Students prepare for the class by going through provided study material in the form of power point presentations, articles, videos, case history or topic then they come to the classroom for to solve cases, quizzes, practice problems and engage in team work.

Seminar: Students present PowerPoint presentations in small groups of 3-4 students on assigned topics.

OPD: Students go to OPD a in small groups

Clinical skills: Students master their examination, procedural, and counselling skills.

Interactive lectures: Small group discussions on specific topics, scenarios, or clinical cases to enhance the active participation of students.

Assignments / Self Studies: Students participate in unsupervised group discussions where they discuss and research their assigned topics and also take follow-up notes of pediatric ward patients.

Objectives (Intended outcome) of the Internal Medicine & Four Allied modules:

By the end of the course of Internal Medicine (and Allied Disciplines) and for each of the conditions listed in these modules, final year MBBS students will be able to:

- discuss the etiology, risk factors, clinical presentations and relevant investigations for each of conditions/disease
- correlate the conditions' pathophysiology with signs and symptoms
- justify differential diagnoses and diagnoses on the basis of history, examination findings and investigation reports
- discuss outlines of treatment plans for each
- explain plans for prevention of conditions where appropriate
- deliberate on complications and their principles of management

Course Content : We have divide the course contents into 9 modules

<table>
<tr>
<td><u>Module I Blood (Medical Unit I)</u>
• Iron Deficiency Anemia
• Hemolytic Anemia and Related Disorders.
• Aplastic Anemia
• Haemoglobinopathies
• Megaloblastic Anemia
• Blood Transfusion And Complications</td>
<td><u>Module I Oncology (Hematological Malignancy) (Medical Unit I)</u>
• Acute Myeloid Leukemia
• Acute Lymphoblastic Leukemia
• CLL
• CML
• Myeloproliferative Disorders
• Lympho Proliferative Disorders
• Multiple Myeloma
• Myelodysplastic Syndrome</td>
</tr>
<tr>
<td><u>Module III Bleeding Disorders (Medical Unit 11I)</u>
• ITP
• Hemophilia
• DIC
• Coagulation Disorders
• Thrombolytic therapy
• Anti-coagulants</td>
<td><u>Module IV INFECTIOUS DISEASES (Medical Unit 11I)</u>
• Malaria
• Rabies
• Corona virus infection and related disorders
• Sexually transmitted infections and related condition
• Pyrexia of unknown origin/Sepsis/septic Shock
• Amebic liver Abscess
• Hydatid Cyst</td>
</tr>
<tr>
<td rowspan="2"><u>Module V Musculoskeletal system (Medical Unit I1)</u>
• Approach to joint disorders
• SLE
• MCTD and overlap syndrome
• Rheumatoid arthritis
• Osteoarthritis
• Osteoporosis and osteomalacia
• Sjorgen’s Syndrome
• Systemic sclerosis
• Poly arthritis nodosa
• Gout
• Wegner’s granulomatosis
• Ankylosing Spondylitis
• Psoriatic Arthritis
• Paget’s Disease
• Reactive arthritis
• Pott’s Disease</td>
<td><u>Module VI Poisoning (Medical Unit I1)</u>
• Paracetamol Poisoning
• Organophosphorus Poisoning
• Snake Bite
• Black stone Poisoning
• Salicylates Poisoning
• Opioid Poisoning
• Benzodiazepine Poisoning</td>
</tr>
<tr>
<td><u>Module VII ENDOCRINE AND METABOLIC DISEASES</u>
(MEDICAL UNIT-IV)
• Diabetes and its complications
• Polyglandular failure
• Approach to hypogonadism
• Approach to hypoglycemia
• Dyslipidemias and treatment</td>
</tr>
</table>

Module VIII Genetic & Geriatric (MEDICAL UNIT-IV)	**Module IX Multisystem (MEDICAL UNIT-IV)**
• Down's syndrome • Kline felter's syndrome • Marfan's syndrome • Turner's syndrome • Health problems of the elderly • General Principles of treating the elderly • Patient Safety : How to Ensure	• Acute Pulmonary Edema • ARDS • Shock • Hemochromatosis • Wilson's Disease • primary biliary cirrhosis • Autoimmune Hepatitis • Alcoholic Liver Disease • MASH & MAFLD • Hepatocellular Carcinoma

PROCEDURES

By the end of the course student should acquire skills in common pediatric procedures according to the following level of competency

LIST OF PROCEDURES:

LEVEL: 1 Able to perform under the direct supervision:
1a; on a mannequin 1b; on simulator
LEVEL: 2 Able to perform under indirect supervision

PROCEDURE	LEVEL
Instruct patients in the use of devices for inhaled medication, Nebulization	2
Prepare and administer injectable (intramuscular, subcutaneous, intravenous) drugs	1
Prescribe and administer oxygen	2
Carry out intravenous cannulation	2
Carry out safe and appropriate blood transfusion	2
Carry out male and female urinary catheterization	2
Carry out nasogastric tube placement	2
Lumber puncture	1
Measure capillary blood glucose	2
Blood sampling Carry out arterial blood gas and acid base sampling from the radial artery in adults	2
Set up an infusion	2

TOPICS FOR INTERACTIVE & TUTORIAL SESSIONS IN MEDICINE

MEDICAL UNIT	WEEK	TOPIC 1	TOPIC 2	TOPIC 3	TOPIC 4
MEDICAL UNIT-01	1st Week	Approach to patient with Anemia	Approach to patient with Lymphadenopathy and Hepatosplenomegaly	Approach to patient with lymphoma	Approach to patient with pancytopenia
	2nd Week	Approach to Patients with heart failure	Approach to Patient with Headache:	Approach to patient with stroke	Approach to patient with Paraplegia
	3rd week	Approach to patient with chronic liver disease	Approach to Patients with hypertension and hypertensive crisis		
MEDICAL UNIT-II	1st Week	Approach to patient with arthritis (mono, poly arthritis, backache-sero neg. arthritis\ gout)	Approach to patient with SLE/ systemic sclerosis/ MCTD/ dermato-polymyositis (history and clinical examination diagnosis and management)	Approach to patient with Rheumatoid Arthritis	Approach to vasculitis Poly arthritis nodosa/ Wegner's granulomatosis
	2ND WEEK	Approach to poisoning Organophosphorus Poisoning/ Paracetamol Poisoning/ Salicylates Poisoning	Approach to patient with corrosive poisoning	Approach to osteoporosis/ osteomalacia	Approach to Bacterial endocarditis pathophysiology, history and clinical examination, diagnosis and management
	3rd WEEK	Approach to comatose patient	Approach to patient with meningitis /encephaltis		

MEDICAL UNIT- III	1st week	Approach to patient with HIV and its diagnosis, complications and management	Approach to patient with Dengue & Chicken Guinea	Approach to patient with acute febrile illness (short and long duration)/ approach to patients with fever and unconsciousness	Approach to patient with Bleeding Disorders
	2nd week	Approach to patient with Electrolyte Imbalance (Hypo and Hypernatremia and Hypo and Hyperkalemia	Approach to patient with Renal Failure and Differentiation between AKI and CKD	Approach to patient with anasarca	Approach to patient with sexually transmitted diseases
	3rd week	Approach to patient with pyrexia of unknown origin	A Approach to patient with liver abscess/Hydatid cyst		
MEDICAL UNIT-IV	1st week	Approach to patient with Diabetes mellitus its diagnosis, investigations and its management (including oral and insulin)	Approach to patient Diabetes mellitus and its complication (acute) DKA/ HONK/ hypoglycemia) and chronic)	Approach to patient with Diabetes foot	Approach to patient with hypo and hyper thyroidism
	2nd week	Approach to elderly patient	Approach to patient with Heat Stroke	Approach to patient with obesity and metabolic syndrome	Approach to patient with hypo and hyper cortisolism
	3rd week	Approach to Hypogonadism	Approach to hypoglycemia		

UPDATED TIME TABLE FOR FINAL YEAR MBBS
ACADEMIC YEAR 2025

Curriculum: Integrated Modular Curriculum
For: Liaquat University Medical & Health Sciences and its constituent and affiliated colleges

Time	Monday	Tuesday	Wednesday	Thursday	Friday
08.15 to 09.00 AM	Interactive Lecture	Interactive Lecture	Interactive Lecture	Interactive Lecture	alternate week Skill lab/ Tutorial on Approach to patient
09.15 to 10.30 AM	Medical Unit I Students with postgraduates for learning history taking and physical examination	Medical Unit II Students with postgraduates for learning history taking and physical examination	Medical Unit III Students with postgraduates for learning history taking and physical examination	Medical Unit IV Students with postgraduates for learning history taking and physical examination	Students with postgraduates for learning history taking and physical examination
10.30 to 11.30	Attending ward rounds	Attending ward rounds	Attending ward rounds	Attending ward rounds	Attending ward rounds
11.30 AM to 12.30 PM	Tutorial on Approach to patient	Tutorial on Approach to patient	Tutorial on Approach to patient	Tutorial on Approach to patient	alternate week Skill lab Small Group Learning Bedside/Topic
12.30 To 1.30 PM	Small Group Learning Bedside/Topic	Small Group Learning Bedside/Topic	Small Group Learning Bedside/Topic	Small Group Learning Bedside/Topic	Small Group Learning Bedside/Topic
1.30 PM To 03.00 PM	Individual History and exam by subgroups as per allotted beds supervised by postgraduate	Individual History and exam by subgroups as per allotted beds supervised by postgraduate	Individual History and exam by subgroups as per allotted beds supervised by postgraduate	Individual History and exam by subgroups as per allotted beds supervised by postgraduate	Self-Directed Learning (SDL)

Note: Allied department will follow similar pattern
Constituent and affiliated colleges follow same pattern and adjust according to feasibility and structure

ASSESSMENT:

Students go through formative and summative assessments in their ward postings.
Summative assessment is done at the end of the clinical posting. The students are assessed on

a) Written examination.
b) Clinical examination

Total =100 marks

a) Written examination consists of 15 BCQs (Total 30 marks)
b) Clinical examination (one long case 40 marks and one short case 20 marks) 05 marks on Histories submission
05 marks on attendance

Students having attendance less than 75 percent will not be allowed to sit in ward test

BOOKS RECOMMENDED

MEDICINE

- Davidson's Principles and practice of Medicine
- Kumar & Clark Clinical Medicine
- Macleod's Clinical Examination
- Hutchisons Clinical Methods an Integrated Approach to Clinical Practice 25th Ed

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF PULMONOLOGY

DEPARTMENT OF GASTROENTEROLOGY

ACADEMIC SESSION 2024-25

ALLIED MODULES

DEPARTMENT OF PULMONOLOGY (CHEST MEDICNE)

S. No	Teaching Faculty
01	Dr Mobin Ahmed Memon INCHARGE
02	Dr Abdul Hafeez Thebo
03	Dr Ghulam Maqtada

- **Topics for Interactive Tutorial & Small Group Leaning**

Day	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Topic for Tutorial- Approach to patient	Approach patient with Acute Dyspnea (Bronchial Asthma, Pulmonary Edema and Pulmonary embolism)	Approach to patient with chronic dyspnea and chronic chough (Chronic Obstructive Pulmonary Disease-COPD with complications, Interstitial Lung Disease-ILD)	Approach to patient with pneumonia & Lung Abscess	Approach to patient with Pleural effusion & Pneumothorax	Approach to patient with Pulmonary Tuberculosis
Small Group Discussion	Chest-X-ray Interpretation of normal/ Ab normal Chest-X-ray	Approach to patient with Bronchiectasis & Cystic fibrosis/ Spirometry	Approach to patient with lung tumor	Pulmonary Hypertension/ Respiratory Failure/ARDS	Ward-Leaving Test

- **DEPARTMENT OF GASTROENTEROLOGY**

S. No	Teaching Faculty
01	Dr Muhammad Akram Bajwa (Chairman)
02	Dr Nand lal Seerani
03	Dr Riaz Awan

- **Topics for Interactive Tutorial & Small Group Leaning**

Day	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Topic for Tutorial- Approach to patient	Approach to patient with Dysphagia and Dyspepsia- GERD APD (including H. pylori)	Approach to patient with Upper GI Bleed Hematemesis	Approach to patient with Lower GI Bleed Malena	Approach to patient with Jaundice Including Viral Hepatitis	Approach to patient with Acute and Chronic Liver Disease
Small Group Discussion	Common Lab tests to diagnose GIT & Hepatobiliary Diseases/ Interpretation of Liver Function Tests	Malabsorption syndromes; Celiac diseases, Abdominal TB, Intestinal Lymphoma	Acute & Chronic pancreatitis	Approach to patient with Acute & Chronic Diarrhea	Ward-Leaving Test

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF

PAEDIATRICS

ACADEMIC SESSION 2024-25

PEDIATRIC TEACHING FACULTY:

S.No	Name	Unit
1.	Prof Dr Shazia Memon	Unit-1
2.	Prof Dr Farzana Shaikh **(Chairperson)**	Unit-2
3.	Prof Dr Chetan Das	Uint-1 (Incharge PICU)
4.	Prof Ghulam Shabbir Laghari	Unit 2
5.	Dr Abdul Hameed Radhan Associate Professor	Unit 2
6.	Dr Mushtaque Ali Shah Associate Professor	Unit1
7.	Dr Fouzia Balouch Associate Professor	Unit 2
8.	Dr Saroop Chand Assistant Professor	Unit 1 (Incharge NICU)
9.	Dr Zameer Ahmed Qambrani, Assistant Professor	Unit 2
10.	Dr Khuda Bux Khoso Assistant Professor	Unit 2
11.	Dr Shahjahan Fazallani Assistant Professor	Unit 1 (Incharge Paeds Gastero)
12.	Dr Aenny Razzaque Assistant Professor	Unit1
13	Dr Kausar Keerio Assistant Professor	Unit1
14.	Dr Muhammad Touseef Senior Registrar	Unit 1
15.	Dr Shahzad Senior Registrar	Unit 2
16.	Dr Fouzia Shaikh Clinical Demonstrator	Unit 1
17.	Dr Ayesha Ahmed Clinical Demonstrator	Unit 2

MISSION OF UNDERGRADUATE PEDIATRIC TRAINING:

To deliver excellence in teaching and learning and actively engage students to develop the minimum essential clinical knowledge, psychomotor skills, critical thinking decision making, and counseling and communication skills regarding the management of pediatric illnesses to ensure the delivery of safe patient care keeping in mind the contextual needs of the community and to effectively deal with global healthcare challenges.

PURPOSE OF STUDY GUIDE

To facilitate the student's learning by providing an outline of the modules, teaching methods, assessment process, and evaluation strategies in context to their themes and sub themes required to achieve the exit competencies in the field of Paediatrics. This study guide also contains details of the teaching schedule and assigned faculty members for each module whom they can contact anytime for guidance or queries.

RULES AND REGULATIONS:

1. Daily timings for pediatric posting is 8.30 to 3.00pm, biometric (digital) and manual attendance both will be taken into account for this purpose.

2. 75% of class attendance is mandatory to appear in end of rotation test.

3. After 9.00 a.m. Students are considered to be late and three late coming will be count as one absent.

4. Attendance of all three sessions will be mandatory for attendance of the day

5. Evening calls will be assigned in groups for 3 hours/day either 3-6 pm or 5 to 8 pm as per their residence and availability conveyance facility.

6. Bed allotment of students will be done and all students are supposed to follow their patients accordingly.

7. Formative assessment in form of end modular test/ TBL and WBA (Mini- Cex) will be taken multiple times throughout the rotation while summative assessment will be arranged for last 2-3 days of rotation (clinical examination & OSCE).

8. OPD timing will be strictly followed from 11.30 to 12.30 pm on respected days Except Friday timings of 11.00 to 12.00pm as per the task of the day whether outdoor or indoor.

Discipline-Specific Outcomes of Pediatric teaching (undergraduate).

At the end of the Pediatric clerk ship, the students should be able to:

1. **Take the appropriate history**, of patients taking in to consideration the age, birth history development, socioeconomic status, family, nutritional, and immunization aspects.

2. **Demonstrate Physical examination skill** that reflects consideration of clinical presentation and comfort according to age and development of child.

3. **Formulate problem list of active and chronic issues**, including a differential diagnosis of their pediatric presentations. A safe and patient-centered approach should be used for the diagnosis of major presenting problems encountered in pediatrics by using clinical reasoning skills based on the following:

- Relevant basic and clinical science knowledge and Evidence-based medicine.

4. **Select the most appropriate investigation** relevant to each of the presenting clinical scenarios with justification for its selection

- Septic screening

- Metabolic workup
- Screening test
- Radiological investigation

5. Develop a management plan for each problem on the problem list, justify it, interpret data, and learn to identify and manage critical and acute pediatric illnesses. While presenting a management plan

- Evidence-based recommendations should be considered.
- Basic and clinical science concepts should be applied.

6. Demonstrate proficiency in specific procedural skills.

7. Demonstrate practical communication skills with the patient's family.

- Establish rapport with children
- Counseling of patients regarding common pediatric presentation
- Communicate the result of pediatric history and physical examination in a well-organized written and oral report.

8. Demonstrate collaboration with other team members as a part of a multidisciplinary team in caring for children. Work as a team in solving clinical problems as in Case Based Learning (CBLs) during the pediatric rotation.

9. Able to demonstrate professionalism. Professional behavior in the form of:

- Punctuality
- Expresses awareness of emotional, personal, family, and cultural influences on patient well being
- Respectable and professional dressing, including wearing a white coat.
- Demonstration of respect and courtesy towards patients and classmates.

10. Ensure patient safety: The student should be aware of and practice the principles of patient safety, which include.

- Understanding and learning from errors
- Engaging with patients and caregivers
- Being an effective team player
- Practicing infection control
- Improving medication safety

11. Identify and access information/resources on evidence-based pediatric practice.

- Demonstrate continuous learning
- Participate in departmental Continuing Medical Education activities to update their knowledge.

PROGRAM

5th-year MBBS Pediatric clinical posting comprises 8-weeks (4-weeks/ unit) of clinical rotation in pediatric department. Students go through the pediatric outpatient clinic, the EPI clinics, pediatric ward, pediatric ICU, and Neonatal ICU.

TEACHING/LEARNING STRATEGY: During rotation, students will learn through

- Case-based learning
- Bedside clinical teaching sessions
- Flipped class rooms
- Seminars

- Role-play/role modeling
- Outpatient-based teaching
- Interactive lectures
- Working as a team with postgraduates and senior colleagues (house officers) during their evening postings, students also visit Emergency pediatric patients under the supervision of pediatric residents and then follow the patients from admission till discharge.

PAEDIATRICS 5th YEAR CLINICAL TEACHING SCHEDULE

TIME	ACTIVITY
08:30 to 09:30 am	Introduction of the task by lead facilitator And brief description / demonstration on the topic
09:30 to 10:30 am	History Taking/bed side teaching
11:00 to 12.00 pm	Case based learning/Interactive lecture
12:00 to 01:30 pm	Practical task and clinical examination demonstration by lead facilitators /OPD/clinical skills
1:45 to 3.00 pm	Summarization of the task, feedback and assignment for next day

Case base learning: Students present the history and examination of a patient the then differential diagnosis, investigations and management is discussed in detail

Bedside teaching: History taking, clinical examination, and counseling skills are taught and practiced at the bedside or at OPD as task of the day

Flipped Classroom: Students prepare for the class by going through provided study material in the form of power point presentations, articles, videos, case history or topic then they come to the classroom for to solve cases, quizzes, practice problems and engage in team work.

Seminar: Students present PowerPoint presentations in small groups of 3-4 students on assigned topics.

EPI/OPD: Students go to OPD and EPI Center in small groups to learn Vaccination and practice clinical skills, mainly focusing on IMNCI.

Clinical skills: Students master their examination, procedural, and counseling skills.

Interactive lectures: Small group discussions on specific topics, scenarios, or clinical cases to enhance the active participation of students.

Assignments / Self Studies: Students participate in unsupervised group discussions where they discuss and research their assigned topics and also take follow-up notes of pediatric ward patients.

CPC organized by Paediatrics Department:

1. Components of EPI program its success and failure.
2. EENC and KMC when and where.
3. CMAMprogramitsroleinpreventionofmalnutritioninchildrenunder5.
4. Updates in asthma management in children.

Research projects:

1. Toidentifytheriskfactorsforfailureofimmunizationinchildrenunderone year.
2. To evaluate the risk factor formal nutrition in children.
3. Reasonsforlackofexclusivebreastfeedingininfantsunder6months.
4. Association of pneumonia with malnutrition.

ASSESSMENT: Students go through formative and summative assessments in their 8 (4) weeks of clinical rotation.

Formative assessment:

Formative assessment focuses on learning and improvement of students by giving them specific tasks and providing them constructive feedback.

1. End Modular test: That will be taken after end of each module. Though that will be formative but we will assign 5% weightage.
2. Structured Bedside Assessment: is a method of formative assessment in which groups of 4-5 students are observed while they perform clinical skills, followed by structured feedback. by facilitator and co facilitators.
3. TBL Team based learning: taken after some modules which are cognitively rich. Though that will be formative because feedback will be given but we will assign 5% weightage as well.

Summative Assessment: Summative assessment focuses on cumulative evaluation of the student learning. Its further divided into Continuous assessment and End of rotation test. 20% of the total marks are carried to the final year university-based assessment at the end of the course.

Marks assigned on Assessment:

Continuous assessment has 40% weightage, and it has following components

- End module assessment 5X8=40
- TBL 5x2=10

Mandatory requirement to appear in final end rotation assessment:

- Attendance/punctualityduringclinicalpostingincludingEveningposting
- Logbook (history and daily work record)
- Submission of the assignment.

End of rotation test: 50%

- Students should submit a clinical Log book at the end of their rotation in Pediatrics.
- 75%attendanceisrequiredtobeeligiblefortheend-of-rotationtest.
- In summative assessment, students will be examined for
- Short case and long case 20marks
- Ten stations of OSCE (static and interactive)10x3=30

APPENDICES

APPENDIX(A)

Content: We have divide the course contents into 9 modules

<table>
<tr>
<td><u>Module I Introduction module</u>
Overview of Pediatric Medicine
Overview of growth and development
Pediatric history taking (inpatient)
Pediatric history taking and examination (outpatient)
Physical examination</td>
<td><u>Module I Neonatology (Unit-I)</u>
ENCC, HBB
Sick young infant (neonatal Sepsis)
Neonatal Jaundice
Prematurity with complications
Birth Asphyxia with complications
Breast feeding counseling.</td>
</tr>
<tr>
<td><u>Module II Pediatric Infections (Unit-II)</u>
EPI Program
EPI Disease
Non-EPI Diseases</td>
<td><u>Module III Nutrition (Unit-I)</u>
Normal Nutrition/IYCF
CMAM/SAM
Micronutrient deficiency
Wasting/Obesity</td>
</tr>
<tr>
<td><u>Module IV Blood (Unit II)</u>
Anemia: Nutritional & Hemoglobinopathies, Bone marrow aplasia
Bleeding: Hemophilia, ITP, Won Willebrand,
Leukemia, Lymphoma
Blood transfusion Protocols and reactions</td>
<td><u>Module V Neuropsychiatry (Unit-I)</u>
Brief introduction on development
CNS infections with complications
Epilepsy/Cerebral Palsy
Small/ large Head
ADHD/Autism</td>
</tr>
<tr>
<td colspan="2"><u>Module VI Cardio/Respiratory Diseases (Unit-II)</u>
Upper Airway disease: Croup, Epiglottitis, Foreign Body inhalation
Lower Airway: Asthma, Pneumonia & TB cover in infections module
X-ray Interpretation
Poison and Shock will be covered in this session.
Congenital Heart Disease: Cyanotic and Acyanotic CHD with complications.
Rheumatic Heart Disease / Congestive cardiac Failure / Myocarditis
Essential Hypertension</td>
</tr>
<tr>
<td><u>Module VII GIT & Hepatology (Unit-I)</u>
Acute diarrhea cover in infections
Chronic Diarrhea, Celiac and cystic fibrosis
Viral Hepatitis/ CLD and portal hypertension</td>
<td><u>Module VIII Renal & Endo (Unit-II)</u>
Nephrotic syndrome
AGN &Renal failure
UTI
CKD/Short stature
Thyroid Problem Diabetes Mellitus</td>
</tr>
</table>

APPENDIX (B) List of mandatory Examination Skills

- Measure and interpret height, weight, and head circumference, calculate BMI and plot these readings on a growth chart.
- Measure and interpret vital signs
- Palpate for fontanels and suture lines
- Elicit primitive reflexes
- Palpate all pulses including femoral
- Assess the lumbosacral spine
- Perform Developmental examination
- Performa thorough general physical examination
- Perform a thorough Systemic examination including Abdominal, respiratory, central nervous system and cardiovascular system examination.

APPENDIX(C)

PROCEDURES: By the end of the course student should acquire skills in common pediatric procedures according to the following level of competency

LIST OF PROCEDURES:

LEVEL:1 Able to perform under the direct supervision:
1a; on a mannequin 1b; on simulator
LEVEL:2 Able to perform under indirect supervision

PROCEDURE	LEVEL
Instruct patients in the use of devices for in haled medication	2
Prepareandadministerinjectable(intramuscular,subcutaneous,intravenous) drugs	1
Prescribe and administer oxygen	2
Carry out intravenous cannulation	1
Carry out safe and appropriate blood transfusion	1
Carry out male and female urinary catheterization	1
Carry out nasogastric tube placement	1

Text Book

Resource material for final year teaching:

Nelson text book of pediatrics, 21st edition
Nelson Essentials of Pediatrics
Current Diagnosis & Treatment Pediatrics, 23rd edition
Pakistan pediatric association textbook
Illustrated Pediatrics by Tom Lissauer

WHO publications and society guidelines:

WHO publications on IMNCI
GINA Guidelines, Global Strategy for Asthma Management and Prevention. WHO;
Global Database on child growth and Malnutrition
WHO publication on Tuberculosis
Expanded Program on Immunization in Pakistan

Clinical Methods:

Macleod's Clinical Examination Hutchison's
Clinical Methods

Department of Paediatric, LUMHS Teaching Schedule Final Year MBBBS Unit-1

WEEK 1

Day	08.30-09.30 am	09:30–11:00 am	11.30–01:00 pm	01:00-02:00 pm	02:00-03:00 pm
1.	Paediatric history with importance of BIND and systemic inquiry	Practice on history taking in small groups under supervision of co facilitators	Growth and development Assessment Practical demonstration on patient.	Practice on history taking with assessment of growth and development	Summarization of today's task **Home assignment** IMNCI an integrated and holistic approach
2.	Introduction to IMNCI with demonstration on wall charts 02 months to 59months	History taking by students in groups Integration of IMNCI	Practical demonstration by lead facilitator on general physical examination on patient and CBD and feedback on indoor history	Practice on general physical examination in small groups under supervision of co facilitators	Summarization of today's task Introduction to CRF 2month to 5 years (5mainsymtoms)
3.	Practice on filling of CRF (2month -5 years) Check for general danger signs And 5 main symptoms	Practical demonstration on IMNCI strategy (Preventive components)	Practical demonstration on IMNCI strategy (Therapeutic components)	Practice on filling of CRF On five main symptoms at indoor (severe classification)	Summarization of today's task Home assignment for screen check for Malnutrition and palmar Pallor
4.	Practice on filling of CRF Demonstration and practice on whole process at OPD/ indoor	First formative assessment on history general physical examination and 2 months to 5 years IMNCI			Summarization of today's task Task for next session Introduction ENCC Neonatal examination J2-J7 ENC
5.	ENC Neonatal history and examination (neonatal recording form)	Practice on filling of Neonatal recording forms And taking neonatal history	Breastfeeding assessment Feeding problems	Practical session on feeding problem and breast feeding counseling	Summarization of today's task Introduction IMNCI sick young infant module

WEEK 2

Day	08.30-09.30 am	09:30–11:00am	11.30–01:00 pm	01:00-2:00pm	02:00-03:00pm
06	Brief introduction to sick young infants Neonatal sepsis	Demonstration on neonatal examination Practice on filling of CRF 0-2 months	SGD and CBD on sick young infant and NNS	Check for HIV, IMNCI approach	Summarization of today's task Next day task Neonatal jaundice Difference in physiological and pathological jaundice CBD
07	Difference in physiological and pathological jaundice CBD	Practice on filling of CRF 0-2 months Followed by feed back	Birth Asphyxia, Neonatal Seizures	Demonstration on Neonatal resuscitation And practice in small groups	Summarization of today's task Next day task Approach to small baby & KMC
08	Practical approach to prematurity its complication and prevention	Practice on filling of CRF (0- 2month) Whole case approach at OPD	Practical session on feeding assessment and feeding counseling with role plays by lead facilitator	Feeding history and breast feeding assessment Feeding counseling	Summarization of today's task Revision of module
09	2nd Formative assessment on case recording form 0 - 2 months IMNCI, and TBL (Neonatology)				Nutrition in first1000 days Growth velocity charts Nutritional statistics/ indicators
10	Nutrition in first 1000 days Growth velocity charts Nutritional statistics/ indicators	Practice on history taking in small groups **Nutritional history**	Practical demonstration on patient by lead facilitator On anthropometry Height, weight, MUAC	Practice on IMNCI CRF Check for malnutrition	Summarization of today's task Introduction to CMAM with four components

WEEK 3

Day	08.30-09.30 am	09:30–11:00 am	11.30–01:00 pm	01:00-02:00 pm	02:00-03:00 pm
11	Introduction CMAM	Practice on Screening by MUAC and Anthropometry	Practical demonstration by lead facilitator GPE on patient SAM child (Macro & micronutrients)	Practice on GPE in small groups under supervision of co facilitators Practice on filling of CCP form and daily care form	Summarization of today's task10 step management of SAM
12	10 step management of SAM Demonstration on filling of CCP form	Case based discussion on SAM with complication	Outdoor visit of OTP OPT protocol	Indoor visit of NSC Short case evaluation in NSC essential task to be assesses on each student nutritional assessment and GPE on SAM child (Mini CEX)	Summarization of today's task BFHI / IYCF key messages Responsive feeding and its importance
13.	BFHI/IYCF key messages Responsive feeding and its importance	Practical session on Nutritional counseling with role plays	2nd formativeassessment SBQ , TBL and short assay on nutrition module		Approach to a child with CNS infections, febrile convulsions
14.	Introduction to CNS infections Approach to a child with CNS infections, febrile convulsions	Practice on history taking in small groups for CNS infections, Febrile convulsions	Practical demonstration on patient by lead facilitator for CNS examination	Practice on IMNCI CRF Check for Neck stiffness General danger signs And motor system examination	Summarization of today's work Next day task tutorial on childhood epilepsy

15.	Introduction to epilepsy, Approach to a child with unprovoked convulsions with case scenarios	Practice on history taking and CNS examination Able to differentiate b/w UMNL/ LMNL	Presentation on AFP by lead facilitator CBD	Practice on CNS examination in small groups under supervision of co facilitators	Summarization of today's task. Next day session tutorial on cerebral Palsy

WEEK 4

Day	08.30-09.30 am	09:30–11:00 am	11.30–01:00 pm	01:00-02:00 pm	02:00-03:00 pm
16.	Introduction to Cerebral Palsy, etiology, presentation and Management	History taking and examination of a child with cerebral palsy and developmental assessment	Visit to Rehabilitation center with Demonstration of clinical signs on Patient by lead Facilitator, And Developmental Assessment	Approach to a child with Behavioral disorders (ADHD and ASD)	Summarization of today's task Next day session tutorial on ADHS & ASD
17.	Case based Discussion and video demonstration on ASD	Short case Examination motor system Developmental assessment SOMI/gait assessment	SBQ, TBL and short essay on Neuropsychiatric Module		
18.	Acute watery diarrhea and dysentery classification of dehydration and it's management	Practice on history taking in small groups Hydration Status and its management according to IMNCI	Practical demonstration on patient by lead facilitator On hydration Status and Shock and Plan C Management	Practice on filling of CRF of IMNCI 02 month to 05 years age and counseling to patients with diarrhea	Summarization of today's task Next day session chronic diarrhea tutorial (CBD)

19.	Chronic diarrhea Causes and management case scenarios followed by CBD	Clinical approach to a child with chronic diarrhea. Celiac disease and other	GPE, demonstration of Signs of macro and micronutrients deficiency on malnourished child (SAM	Mini Cex on GIT and Short case examination (abdominal examination with visceromegaly) Case of CLD or Celiac disease	Summarization of today's task Next day session tutorial on viral Hepatitis and CLD(CBD)
20.	Acute viral hepatitis (A, B, C E) case scenarios followed by CBD	Clinical Approach to a child with CLD Case based discussion on CLD and its complications	Long case assessment on SAM child or CLD child followed by feedback	SBQ, TBL and short essay on GIT, Hepatobiliary	

Department of Pediatrics LUMHS Teaching Schedule Final Year MBBS Unit-II

WEEK 1

Day	08.30-09.30 am	09:30–11:00 am	11.30–01:00 pm	01:00-02:00 pm	02:00-03:00 pm
01	Paediatrics history with importance of BIND and systemic inquiry	Practice on history taking in small groups under supervision of co facilitators	Growth and development Assessment Practical demonstration on patient by lead facilitator	Practice on history taking with assessment of growth and development	Summarization of today's task **Home assignment** IMNCI an integrated and holistic approach
02	Introduction to IMNCI with demonstration on wall charts 02 months to 59 months	History taking by students in groups Integration of IMNCI	Practical demonstration by lead facilitator on general physical examination on patient and CBD and feedback on indoor history	Practice on general physical examination in small groups under supervision of co facilitators	Summarization of today's task Introduction to CRF 2 month to 5 years (5 main symptoms)
03	Practice on filling of CRF (2month - 5 years) Check for general danger signs And 5 main symptoms	Practical demonstration on IMNCI strategy (Preventive components)	Practical demonstration on IMNCI strategy (Therapeutic components)	Practice on filling of CRF On five main symptoms at indoor(severe classification)	Summarization of today's task Home assignment for screen check for Malnutrition and palmar Pallor
04	Practice on filling of CRF Demonstration and practice on whole process at OPD/ indoor	First formative assessment on history general physical examination and 2months to 5 years IMNCI			Summarization of today's task. Task for next session Introduction Infectious disease in children
05	Immunization	Interactive lecture on Immunization (EPI Centre)	CBL (vaccines and side effects) Schedule	Fever IMNCI Malaria Check for Immunization	Approach to child with fever and body rashes Measles/Chicken pox/Dengue/Rubella

WEEK 2 (Unit-II)

Day	Theme	08.30-9.30am	9.30-11.00 am	11.30 am-12.30 pm	12.30-02.00 pm	02.00-2.30 pm
06	Fever with cough	Interactive lecture on Approach to cough Tuberculosis and HIV	Short case on GPE and Chest examination	CBL (Pneumonia and Pertussis)	CBD on Diagnosis of TB in children	Summarization and assignment
07	Fever with focus	Approach with throat and Ear	Practice patients CRF on filling	CBL (Diphtheria and Mumps	Long case assessment	Summarization and assignment Malaria & Typhoid guideline
08	Fever without focus	Approach and Malaria and Typhoid CBL	Practice on Patients, history taking and Examination	Rabies with pre and post exposure vaccination	Tetanus treatment and prevention	Summarization and assignment For next module
09	**Assessment of whole module (Mini-CEX(short cases, SBQs.**					
10	Pallor	Interactive lecture on Approach to child with Anemia (Nutritional Anemia & Thalassemia)	Practice on patient by history taking and focused examination (GPE & Hepatosplenomegaly)	Case presentation by students and discussion	Data interpretation CBC interpretation, Hb Electrophoresis PBL in small groups	Summarization and assignment On Blood Transfusion in children: Indications &complications

WEEK3 (Unit-II)

Day	Theme	08:30 am to 9:30 am	09:30 am to 11:00 am	11:30 am-1230 pm	12:30 pm to 02:00 pm	02:00 pm-02:30 pm
11	Bleeding disorder in children	Hands on demonstration on transfusion procedure and discussion	Interactive lecture on Approach to child with Bleeding disorders in children. Hemophilia, ITP, Von willebrand disease	Practice on patients: history taking and rashes on body.	CBL, data interpretation and discussion Q&A	Summarization and assignment On common hematological malignancies
12	Group discussion on pediatric malignancies Case based discussion on Fever, Pallor and lymphadeno pathy	Approach to child with Fever, pallor and Lymphadenop athy	**Assessment of whole module (Mini-CEX(short cases, Long case SBQs.**			Summarization of whole module and feedback
13	Cough & Difficult Breathing	Interactive lecture on Common Respiratory conditions Upper and Lower Air way Obstruction	History taking and examination on patients with Bronchiolitis, Asthma or cystic fibrosis	CBD on patient with respiratory emergencies: Anaphylaxis, Foreign Body Inhalation, Epiglottitis and Croup	Practical demonstratio n on patients with use of nebulizer &Inhaler	Summarization and assignment Oxygen therapy in Children
14	Difficult breathing	Live session on oxygen therapy in children case based Discussion	Interactive session on X-ray chest interpretation& correlation with clinical findings	Interactive discussion on Approach to child with CCF	Practice on Patient by history taking and precordial examination in small groups	Summarization and assignment on Rheumatic fever and RHD
15	Recurrent Difficult Breathing	Approach to child with congenital Heart disease	Case based discussion on diagnosis and management of cyanotic and Acyanotic Heart disease	Short case & OSCE assessment and module test	Summarizatio n of module and feedback Assignment on common poisons in children and management. (SDL)	

WEEK 4 (Unit-II)

Day	08:30-9:30am	09:30-11:00 am	11:30am-12.30 pm	12:30-02:00pm	02:00-02:30pm
16	Approach to child with Proteinuria & hematuria interactive lecture	Practice on Patients for history taking & examination	Interpretation of Labs/CBD On AGN, Nephrotic syndrome	Practical demonstration on catheterization, fluid balance and management	Summarization & Assignment on Urinary Tract
17	Case base Discussion on pyelonephritis Cystitis Practical demonstration on collection of urine culture	Approach to child with Renal failure Acuteand chronic	Practice on Patient for history taking and examination	Practice on labs and management Case based discussion in small group	Summarization & Assignment on Obesity
18	Approach to short stature Interactive session	Practice on patient for history taking and examination	Practical demonstration on anthropometry and plot on centiles and labs in OPD	Approach to child with hypothyroidism interactive session with discussion	Summarization Hyperthyroidism in children
19	Case based Discussion on Hyperthyroidism in Children	Interactive lecture on Diabetes Mellitus in children	Practice on patient history taking and examination in OPD	Demonstration Insulin types and techniques. Discussion on complications and counseling of Nutrition	Summarization & Assignment on Obesity in children
20	Case based discussion on Obesity	Assessment SBQs OSCE and Modular test			Summarization & Feed back

In the every rotation student will conduct the CPC and present research project. Participation in research projects and CPCs is mandatory.

Liaquat University of Medical
& Health Sciences, Jamshoro

FINAL PROFESSIONAL

MBBS 2020-21

DEPARTMENT OF
NUCLEAR MEDICINE AND ONCOLOGY (NIMRA)

DEPARTMENT OF
FAMILY MEDICINE

ACADEMIC SESSION 2024-25

DEPARTMENT OF NUCLEAR MEDICINE AND ONCOLOGY (NIMRA)

S No	Teaching Faculty
01	**DIRECTOR /CONSULTANT NUCLEAR PHYSICIAN:** Dr. Syed Shahid Iqbal
	CONSULTANTS
02.	Dr. Muhammad Ameen Abbasi
03.	Dr. Fayaz Hussain Mangi
04.	Dr. Naseema
05.	Dr. Ameeran
06.	Dr. Moin-uddin- Shah
07.	Dr. Badar-ul-Din Memon
08.	Dr. Hanifan
S no	**Topic**
1.	**Introduction to Neoplasm**
	Brief definition of oncology, types of tumors: benign versus malignant
	Etiology and risk factors of various tumors
	Symptomatology, diagnosis and overall treatment cancer
2.	**Head and Neck Cancers**
	Introduction of head and neck cancer
	Sub sites, Etiology and risk factors, Head and neck cancer
	Staging and management and role of chemotherapy and radiation therapy of, Head and Neck cancer
3.	**Carcinoma of Cervix**
	Introduction of carcinoma cervix
	Etiology and risk factors, screening carcinoma
	Staging and Management of carcinoma Cervix
4.	**Carcinoma and Breast**
	Risk factors of Breast cancer
	Management of Breast cancer
5.	**Rectal Cancer**
	Introduction to Rectal Carcinoma
	Etiology and risk factors, Rectal carcinoma
	Diagnosis and management of rectal carcinoma
6.	**Role of Nuclear Medicine in Urinary Tract**
	Anatomy of Urinary tract
	Split renal functions
	ACEI Technique and role Diuretic
	Evaluation of renal & Extra renal Obstruction
7.	**Skeletal Scintigraphy**
	Introduction to Nuclear Medicine
	Routinely performed Nuclear Medicine Scan
	Bone scan 3 phase and delayed scan and radiopharmaceutical used
	Different between metastatic versus metabolic Bone scan (super Scan)

DEPARTMENT OF FAMILY MEDICINE

S. No	Teaching Faculty
01	ASSISTANT PROFESSOR AND INCHARGE: : Dr. Zaheer Ali
S. No	**Topics**
1.	Interlocution & Importance of Family Medicine
2.	Focused History & Clinical Exam
3.	Cost - effective & Biopsychosocial aspects of Primary care
4.	Approach to Diabetes in Primary care
5.	Approach to Hypertension in Primary Care
6.	Primary Care Approach to headache

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