



**CMH Lahore Medical College**  
**Study Guide**  
**Final Year MBBS**  
**2022-2023**  
**Department of Medicine**

Reviewed and Edited

By

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**A good study guide acts as a compass to help students to know their  
Destination, which is course objectives, while an excellent study  
Guide drives them all the way to reach there.**

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## **Introduction to study guide**

This study guide book is developed for Medical undergraduates by consolidated efforts with an intention to help the medical students of MBBS CMH Lahore Medical College to manage their learning rather than provision of curriculum content information alone. The study guide also demonstrates a number of activities to help student to build her/his own learning portfolio that may be used to monitor learning progress and assessment as well. The study guide aims to promote self-regulated lifelong learning among students by giving them the control over their learning.

The pervasive curriculum aspects of undergraduates' competencies, assessment policies and curriculum coordinators are mapped in this guide book. Horizontal integration across the year gives better conceptual understanding while vertical integration promotes clinically relevant understanding. Medicine department CMH aims to improve health indicators of society by improvement of students and doctors in preventive health service provision and health education provision to society through community programs.

The study guide gives an overview of intended course outcomes and objectives in relation to the course content. The assessment methodology tailored to instructional strategy is provided.

This study guide has been carefully designed keeping in view PMC and NUMS curriculum and giving dedicated effort by faculty is done to make this guide tailored to student's needs. Students feedback has been sought and incorporated at all stages during study guide development. Curriculum is a living dynamic entity. Our aim is to improve it by every passing day. This humble effort of all faculty acts as a guiding light for our dear students.

## **Mission Statement**

The CMH Lahore Medical College and Institute of Dentistry aims to provide a highly conducive environment to train a new generation of technology savvy and socially responsible healthcare providers who are well-versed with their role within a healthcare team and while serving the community, demonstrate abilities to practice requisite communication skills, empathy, lifelong learning, critical thinking, and decision making at a national or an international facility.

## **Vision Statement**

The mission of CMH Lahore Medical College and Institute of Dentistry is to undertake following steps to materialize their vision:

1. Ensure provision of a conducive educational environment where students feel well-supported through implementation of learner-centered teaching approaches, inbuilt strong feedback loops and physically comfortable learning environment.
2. Sensitization of students about their role in the society as socially responsible professionals through participation in extracurricular activities like community-based programs, patient welfare societies, blood donors' society, and productive contribution to combat local and national calamities.
3. Students' exposure to the healthcare community, where sympathy and empathy are the cornerstones of our practice. Students commit to understanding their patients not only through their medical conditions but also through their emotions, fears, and unique life experiences. By fostering a culture of compassion, students aim to provide not just medical care but genuine understanding and support to enhance the well-being of those we serve.
4. Students' exposure to cutting-edge technology through campus learning management system and development of their e-portfolios.
5. Leadership and Smart Learning Strategies through implementation of interprofessional curriculum for undergraduate health professions' education students enrolled in medical, dental, allied health sciences, and nursing programs.
6. Provision of opportunities to undergraduate and post-graduate students to have practical experience of leading, working as a team member, critical thinking, problem solving, and decision making.
7. Formal teaching and training of professionalism for students to develop their full potential including communication, and lifelong learning skills through portfolio development among undergraduate and postgraduate students.
8. Implementation of a task-based and outcome oriented longitudinal module on 'Research' for

undergraduate students, leading to publication of research article/s and for cultivation of evidence-based practices.

## **Rationale of Curriculum**

The curriculum is designed to address both local and international needs. The curriculum is focused to prepare students for the international licensing exams and training abroad as well as empowering them to treat local patients with safety and efficiency. Doctors work as a healer in the community. A doctor should have evidence based and updated knowledge about the epidemiology of the practicing area. The curriculum of CMH LMC is planned with a collaboration of clinical and basic sciences faculty in addition to students and medicine department to ensure that the prevailing health conditions of the society are treated and dealt with effectively. The emergence of new techniques in all areas of medicine has led to changes in the curriculum with more emphasis on new and advanced techniques, procedures and evolution of new and advanced technology

## **Introduction to Curricular Framework**

This study guide is developed as resource assistance to the students and faculty. The study guide development process included representation from teaching faculty, management, leadership of college and students. The study guide is made to achieve alignment between societies' needs, institutional needs, patient needs & student's needs.

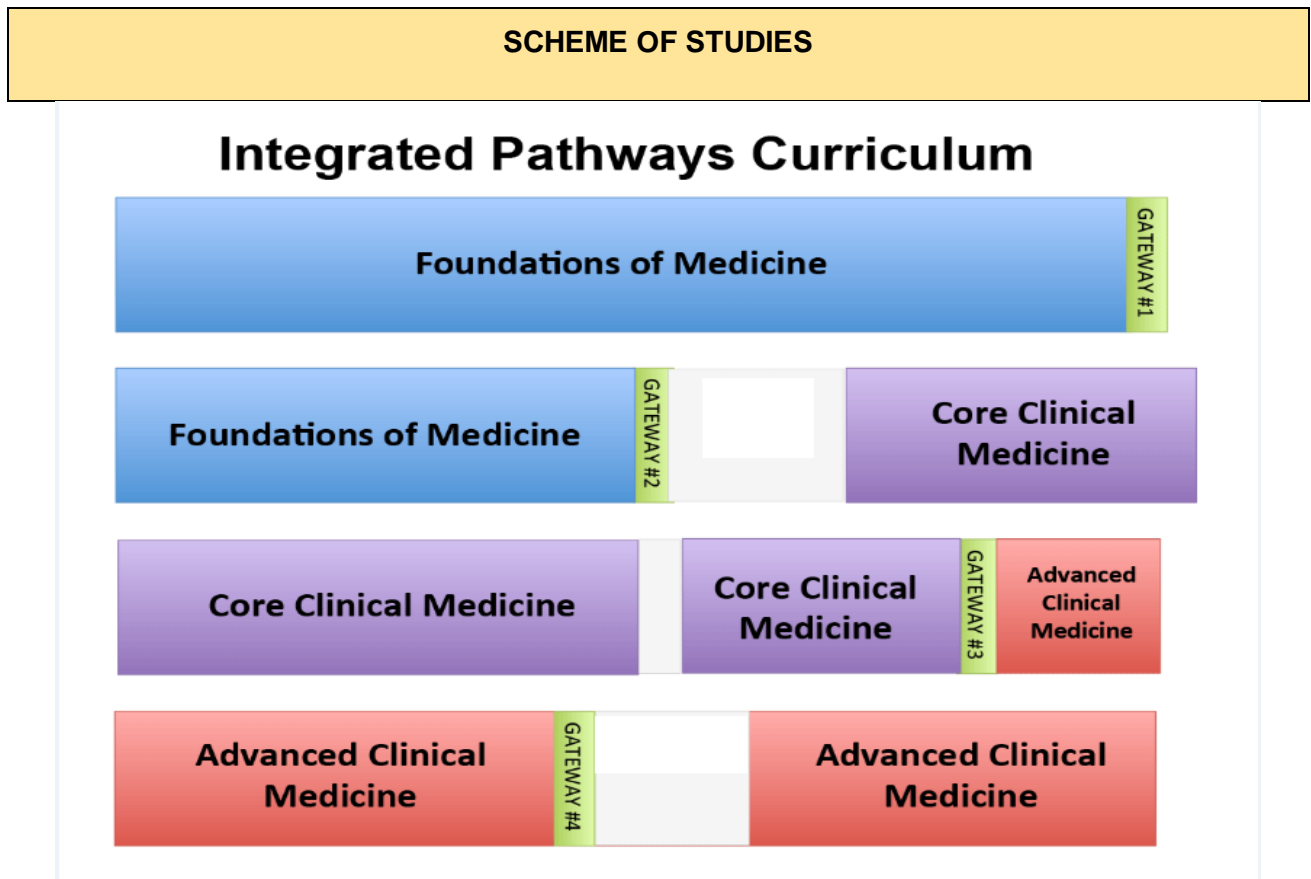
The curriculum implemented is a hybrid type of curriculum which has both horizontal and vertical integration. Spiral integration is introduced as an adjunct to horizontal and vertical integration. The curriculum spans over 3 phases

**PHASE 1 (Year 1 & 2):** Includes clinical lectures in medicine in integration with the basic sciences i.e anatomy, physiology, biochemistry and behavioural sciences.

**PHASE 2 (Year 3 & 4):** Includes preclinical sciences general pathology, community medicine, forensic medicine, behavioural sciences and clinical sciences of eye and ENT integrated with medicine, surgery, gynaecology and paediatrics .

**PHASE 3 (Year 5) :** Clerkship year includes medicine, surgery, gynaecology and Paediatrics

## 5 Years Medicine Curricular Framework



## Curricular Map of MBBS



## **MBBS Program Outcomes**

At the end of five years MBBS undergraduate program, the graduates should be able to:

1. Independently assess the patients, order relevant investigations and formulate a treatment plan.
2. Render treatments in the domain of general medicine to their patients in time efficient and quality-controlled manner.
3. Practice evidence-based medicine
4. Modify medical treatments according to patient's special needs, if any, in the form of medical conditions, physical or mental disabilities.
5. Assess and refer the patients with case difficulty indices requiring consultation or treatment by specialists.
6. Show empathy and respect in their attitude and behavior towards their patients.
7. Maintain high ethical and professional standards in their pursuit of clinical excellence.
8. Draw upon their existing knowledge and update it through continuing education programs.
9. Exercise infection control protocol guidelines laid out by their local health councils.
10. Exercise management qualities to maintain single or multiple unit private practices where applicable.
11. Work in a team of other health care professionals including doctors and paramedical staff.
12. Maintain patient records with emphasis on legal and patient confidentiality aspects.
13. Provide basic life support to patients requiring critical care in or outside medical set up.
14. Manage medical emergencies.

15. Demonstrate clear verbal and written communication skills.

### **Undergraduate Competencies**

CMH Lahore medical College envisions to produce graduates who are proficient in following competencies at the end of 5<sup>th</sup> year

- Medical Expertise
- Communication Skills
- Critical thinking
- Management
- Scholar
- Professionalism
- Evidence based practice providing holistic care
- Empathetic
- Health advocate
- Providing Community service



## **Patient and Doctors Safety**

While rotating through medical wards and outpatient departments' students will be educated for patient's safety and their own safety

- What patient safety is; no harm to patients as defined by WHO
- Understanding and learning from errors
- How to manage clinical risk; clinical risk management specifically is concerned with improving the quality and safety of health-care services by identifying the circumstances and opportunities that put patients at risk of harm and acting to prevent or control those risks
- Methods for quality improvement
- Engaging with patients and carers e.g. informed consent while examining patients or for performing any procedure, conveying truthful information ,showing empathy etc
- Minimising infection through improved Infection control
- Reducing risks associated with Invasive procedures
- Improving medication safety
- Apply universal precautions
- Be immunized against Hepatitis B
- Use personal protection methods
- Know what to do if exposed

- Encourage others to use universal precautions
- Promoting adherence to hand hygiene guidelines
- Students will be taught to use protective equipment like gloves, aprons and face masks

### **Co-ordinator Final year MBBS Medicine Department 2023**

<b>Coordinator Name</b>	<b>Department</b>	<b>Extension</b>
<b>Prof. Rizwana Kitchlew</b>	Medicine	470

### **Student representatives**

<b>Name</b>	<b>Designation</b>
Muhammad Ahmad Nadeem Roll No: 46	BR final Year MBBS
Mahnoor Roll No: 97	GR final Year MBBS

### **Hours of Teaching**

#### **Contact Hours in the subject of Medicine & Allied**

<b>Class</b>	<b>Total Hrs</b>
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1 <sup>st</sup> Year MBBS	32
2 <sup>nd</sup> Year MBBS	30
3 <sup>rd</sup> Year MBBS	120
4 <sup>th</sup> Year MBBS	174
<b>Final Year MBBS</b>	<b>470</b>

## **Introduction to Medicine**

This study guide will help you to visit the most essential topics, system wise, in the subject of medicine. It will help to understand and appreciate each component of the course with its relation to other programs and your future life as a doctor. Thus chances of getting lost and missing important topics in the vast complex subject of medicine will be reduced. The guide is based on system based approach, which is the way curriculum is distributed for this course.

### **a) Resources**

- a. Teaching resources
- b. Infrastructure resources

#### **• Teaching resources**

Medical Students rotate in all three Medical units and Cardiology Unit, where they are exposed to wide range of patients in the wards, OPD's and Emergency department. Teaching schedule includes interactive lectures and bedside clinical teaching. Emphasis is given to integrated medical teaching. It is mandatory for the medical students to attend the Medical Units in the evening. Intensive bedside teaching is done by the faculty members. Students are exposed to subspecialties like Gastroenterology, Hepatology, Cardiology Oncology, Pulmonology, Neurology, Nephrology, Rheumatology, Endocrinology, Psychiatry and Dermatology during their rotations.

Clinical pathological conferences (**CPCs**) are held on regular basis where the students prepare and present under the supervision of faculty members.

Students are assessed on NUMS format at the end of each rotation. Assessment includes OSPE's, short and long cases presentations and discussions. Mid-term assessments and send up examinations are also conducted.

- **Infrastructure resources**

Sr. #.	Infrastructure Resources	Quantity
1	Lecture hall	1
2	OPD <ul style="list-style-type: none"> <li>• General Medicine</li> <li>• Pulmonology</li> <li>• Neurology</li> <li>• GI</li> <li>• Rheumatology</li> <li>• Oncology</li> <li>• Cardiology</li> <li>• Psychiatry</li> <li>• Dermatology</li> </ul>	07 02 03 04 01 03 04 03 06
3	General Medical Wards	4
5	Class Rooms (In the Hospital)	2
6	Mini Library	1

## **b) TEACHING AND LEARNING STRATEGIES**

The teaching strategies were modified keeping in view the prevailing COVID 19 scenario. A hybrid system consisting of virtual teaching and on campus teaching for clinical sessions is planned as a backup if need arises.

Learning Management System (LMS) has been developed. Zoom service will be utilized for teaching sessions and webinars. Socrative App will be used for assessments.

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, practical, and manual dexterity skill sessions.

(i) Methods for achieving cognitive objectives

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Collaborative learning
- Self-study and reading from learning resources

(ii) Methods for achieving psychomotor objectives

- Tutorials and videos
- Clinical demonstrations provided by teaching faculty on models and patients
- Supervised practice on patients
- Skills lab facility

(iii) Methods for achieving affective objectives

- Interaction with peers, group members, teachers, support staff etc. Leading into 360° evaluation
- Group discussions (small and large)
- Role Modelling

**c) LEARNING METHODOLOGIES**

The following teaching /learning methods are used to promote better understanding:

- Interactive lectures
- Small group discussions case based or problem based
- Practical
- Skill sessions
- Self-directed learning
- Assignments

- Oral presentations by students

## **d) Course Outline**

### **1. Course Title: CARDIOLOGY**

**a. Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b. Number of lectures:**

**c. Course Duration: 5<sup>th</sup> year**

### **d. Aims and Objectives of the program**

(i).Rationale

Important clinical implications as common life threatening emergencies related to the system.

(ii).Learning Outcome.

To identify the CVS diseases on basis of history, clinical examination & investigations & plan & initiate relevant management.

### **e. Topics**

- Rheumatic fever and infective endocarditis.

#### • Valvular heart diseases.

- Mitral valve

- Aortic valve

#### • Ischaemic heart disease.

- Angina

- Myocardial infarction

#### • Cardiac arrhythmias

- Atrial fibrillation

- Ventricular tachycardia

- Premature atrial and ventricular beats.

#### • Heart failure.

- Left ventricular failure.

- Congestive cardiac failure.

- Cor pulmonale.

#### • Congenital heart diseases .

- Cyanotic/ acyanotic heart diseases.

- Fallot's tetralogy

- Atrial septal defect

- Ventricular septal defect

- Patent ductus arteriosus

- Cardiomyopathies

#### • Pericardial diseases.

- Constrictive pericarditis

- Pericardial effusion

- Atherosclerosis/arteriosclerosis.
- Hypertension.
- Peripheral vascular disease.
- Acute & chronic ischaemia of the leg
- Aneurysms
- Buerger's disease
- Raynaud's disease
- varicose veins
- Venous thrombosis

**e. Knowledge about subject**

**f. Skills** - The clinical examination methods.

Procedures: CVP & ETT placement, ECG, ETT, Echocardiography, Defibrillator use, Pacemaker placement, Thallium Scan, Cardiac catheterization & Angiography.

**g. Attitude:** towards clinical state of patient e.g. judged by Consent for examination & tests. Empathy and Respect for Privacy, Autonomy & confidentiality of patient. Element of Humanity, Ethics & Justice

**h. Counseling:** Regarding diagnosis, Management, prognosis, prevention & follow up

**i. TOS formation.**

- **LEVEL OF LEARNING**

- **Level 3-** (Expected to be attained in final year MBBS).
- Able to take a focused symptoms based & systemic history performs relevant general & systemic clinical examination, pick & interpret clinical findings, aware of relevant investigations and management principles.

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

- **LEARNING OUTCOMES**

- History taking
- Physical examination
- Practical procedures
- Awareness regarding relevant investigations & management principles
- Develop good communication skills as a health care professional

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding diseases of CVS as listed above</u></b>	<b><u>PI</u></b>	

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform
---------------------------

<u>CVS examination</u>	<u>PI</u>	
<u>Systemic &amp; relevant general physical</u>		
<u>CVP placement</u>	<u>A</u>	
<u>ETT placement</u>	<u>A</u>	
<u>ECG</u>	<u>A</u>	
<u>Exercise Treadmill Test</u>	<u>O</u>	
<u>Pacemaker placement</u>	<u>O</u>	
<u>Defibrillator use</u>	<u>PS</u>	
<u>Thallium Scan</u>	<u>O</u>	
<u>Cardiac catheterization</u>		
<u>Angiography</u>		

_Should be able to diagnose and initiate management plan		
<u>Regarding diseases of CVS as listed above</u>	<u>PI</u>	

#### Mode of Information transfer & assessment tools for competencies:

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical teaching ,Long cases & Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class



		tests MCQ,SAQ,LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

## 2.Course Title: Endocrinology & Metabolic Disorders

**a. Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration: 5<sup>th</sup> year**

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as high prevalence & incidence of diseases related to this system

(ii).Learning Outcome.

To identify the diseases on basis of history, clinical examination & investigations & plan& initiate relevant management.

**e.Topics:**

### Anterior pituitary.

- Growth hormone disorders
- Acromegaly
- Gigantism.
- Short stature
- Infertility
- Diseases of hypothalamus and posterior pituitary.
  - Empty sella syndrome
  - Diabetes insipidus
  - Syndrome of inappropriate ADH secretion (SIADH).
- Thyroid gland.
  - Hyperthyroidism (thyrotoxicosis)
  - Hypothyroidism (myxedema, cretinism)
  - Inflammatory lesions
  - Benign and malignant tumors
- Adrenal Gland.
  - Cushing Syndrome
  - Aldosteronism Primary/Secondary.
  - Hirsutism.
  - Addison's disease
  - Acute Addisonian crisis
  - Inflammatory lesions

- Adrenocortical tumors including Pheochromocytoma
- Endocrine Pancreas
  - Diabetes mellitus and hypoglycaemic states
- Other associated endocrine disorders
  - Sexual precocity
  - Heterosexual precocity
  - Gynaecomastia
- Multiple endocrine neoplasia
  - Type I
  - Type II
- Hyperlipidemia
- Hemochromatosis
- Porphyrias
- Wilson's disease
- Gout and hypercalcemia
- Storage diseases.
- Lipid.
  - Leukodystrophies
  - Niemann pick disease.
  - Gaucher's disease.
- Glycogen.
  - Fabry's disease.
- Hereditary connective tissue disorders
  - Osteogenesis imperfecta.
  - Ehler's danlos syndrome.
  - Chondrodysplasias.
  - Marfan syndrome.
  - Alport syndrome.
- Disorders of amino acid metabolism and storage
  - Homocystinuria.
  - Alkaptonuria.
  - Hartnup disease.
- Renal glycosuria

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods.

BP recording  
 Glucometer use  
 Insulin injection technique

**h. Attitude:** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity ,Ethics & Justice

**i. Counseling** regarding Diagnosis , Management ,prognosis,prevention & follow up.

**j. TOS formation.**

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding diseases as listed above</u></b>	<b><u>PI</u></b>	

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>Systemic &amp; relevant general physical Examination</u></b>	<b><u>PI</u></b>	
<b><u>BP recording</u></b>	<b><u>PI</u></b>	
<b><u>Glucometer Use</u></b>	<b><u>PI</u></b>	
<b><u>Insulin Injection Technique</u></b>	<b><u>PI</u></b>	

should be able to diagnose and initiate management plan		
<b><u>Regarding diseases as listed above</u></b>	<b><u>PI</u></b>	

**Mode of Information transfer & assessment tools for competencies:**

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical	Case presentation &

	teaching, Long cases, Short cases	discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test,Class tests MCQ,SAQ,LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

### 3. Course Title: **Pulmonology**

**a. Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b. Number of lectures:**

**c.Course Duration: 5<sup>th</sup> year**

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as common life threatening emergencies related to the system

(ii).Learning Outcome.

To identify the Respiratory diseases on basis of history, clinical examination & investigations & plan& initiate relevant management.

**e.Topics**

- 1.Acute Pneumonias
- 2.Chronic Pneumonias/Bronchiectasis
- 3.Tuberculosis
- 4.Asthma
- 5.COPD

- 6.ILD/Pneumoconiosis
- 7.Respiratory Failure/Oxygen therapy
- 8.Pleural Diseases
- 9.Sarcoidosis
- 10.Pneumothorax
- 11.Lung Cancer
- 12.Sepsis,D.I.C/Multiorgan Failure/Ventilation

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods.

- Peak Flow meter use
- Nebulization
- Pleural tap
- Pleural biopsy
- Pulmonary Function Tests/Spirometry
- Bronchoscopy
- How to initiate O2 therapy
- Endotracheal suction
- Under water seal aspiration

**h. Attitude:** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity ,Ethics & Justice

**i. Counseling:** regarding Diagnosis , Management ,prognosis,prevention & follow up.

**j.TOS formation.**

**LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding Diseases of Respiratory system</u></b>	<b><u>PI</u></b>	
<b><u>As listed above</u></b>		

## SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES

Should be able to perform		
<u>Respiratory system examination</u>	<u>PI</u>	
<u>Systemic &amp; relevant General physical</u>		
<u>Peak Flow Meter</u>	<u>PI</u>	
<u>Nebulization</u>	<u>PS</u>	
<u>Pleural Tap</u>	<u>A</u>	
<u>Pleural Biopsy</u>	<u>O</u>	
How to initiate O2 therapy	<u>PS</u>	
Endotracheal suction	<u>PS</u>	
Under water seal aspiration	<u>O</u>	
Pulmonary Function Tests/Spirometry	<u>PS</u>	
<u>Bronchoscopy</u>	<u>O</u>	

Should be able to diagnose and initiate management plan		
<u>Regarding Diseases of Respiratory system</u>		
<u>As listed above</u>	<u>PI</u>	

## **Mode of Information transfer & assessment tools for competencies:**

<b>Learning outcome</b>	<b>Mode of information transfer</b>	<b>Assessment tool</b>
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under

		supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test,Class tests MCQ,SAQ,LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

#### 4.Course Title:**Nephrology**

**a.Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration:** 5<sup>th</sup> year

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as high prevalence & incidence of diseases related to this system

(ii).Learning Outcome.

To identify the Renal diseases on basis of history, clinical examination & investigations & plan& initiate relevant management.

#### **e.Topics**

1.Acute renal failure.

2.Chronic renal failure

3.Nephrotic syndrome.

4.Nephritic syndrome.

5.Urinary tract infections

- Infections of the kidneys
- Infections of the lower urinary tract

6.Inflammatory lesions of the kidneys

7.Introduction to dialysis & renal transplant

8.Drugs causing renal disease (brief).

- Analgesic nephropathy.
- Lead, uric acid, hypercalcemia, radiation & hypersensitivityNephropathy.
- Drugs contra indicated in renal insufficiency

- Drugs to be used with caution in renal disease.

9. Polycystic kidneys.

**10. Renal vascular disorders**

- Renal artery stenosis
- Renal vein thrombosis

11. Tumours

12. Hemolytic uremic syndrome.

13. Prostatic diseases

14. Disorders of Acid Base Balance

15. Sodium & Potassium Imbalance

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods.

Urinary Catheter Placement

Introduction to Haemodialysis & Peritoneal dialysis ,Renal Biopsy

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity, Ethics & Justice

**i. Counseling** regarding diagnosis , Management , prognosis, prevention & follow up.

**j. TOS formation**

**LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding Renal diseases as listed</u></b>		
<b><u>above</u></b>	<b><u>PI</u></b>	

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform
---------------------------



<b><u>Relevant Systemic &amp; General</u></b>	<b><u>PI</u></b>	
<b><u>Physical examination</u></b>		
<b><u>Peritoneal Dialysis</u></b>	<b><u>A</u></b>	
<b><u>Haemodialysis</u></b>	<b><u>O</u></b>	
<b><u>Renal Biopsy</u></b>	<b><u>O</u></b>	

Should be able to diagnose and initiate management plan

**Regarding Renal diseases**

**PI**

### **Mode of Information transfer & assessment tools for competencies:**

<b>Learning outcome</b>	<b>Mode of information transfer</b>	<b>Assessment tool</b>
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class tests MCQ, SAQ, LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)

Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS
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## 5.Course Title: GASTROENTROLOGY

**a.Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration:** 5<sup>th</sup> year

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as high prevalence & incidence of diseases related to this system

(ii).Learning Outcome.

To identify the Gastrointestinal diseases & complications on basis of history, clinical examination & investigations then plan& initiate relevant management.

### e.Topics:

#### 1.Oral cavity

- Infections and inflammatory disorders
- Benign and malignant diseases

#### 2.Esophagus.

- Dysphagia with special reference to
- Caesophagus
- GERD
- Achalasia
- Candidiasis of oral cavity and oesophagus

#### 3.Stomach

- Gastritis.
- Peptic ulcer

#### 4.Intestines

- Malabsorption syndromes.
- Tropical sprue
- Coeliac disease
- Inflammatory bowel diseases.
  - Ulcerative colitis
  - Crohn's disease
- Irritable bowel syndrome (IBS).

#### 5.Liver

6.Ascites.

#### 7.Jaundice.

- Congenital hyperbilirubinaemia
- Gilbert syndrome

- Dubin Johnson syndrome
- Rotor syndromes
- Haemolytic
- Obstructive

**8.Hepatitis**

- Viral, acute and chronic
- Toxic
- Drugs
- Auto immune hepatitis.

9.Cirrhosis of liver.

10.Hepatic encephalopathy.

11.Carcinoma liver and transplant.

12.Acute and chronic pancreatitis.

13.Upper GI bleeding, lower GI bleeding

14.Drugs contraindicated in liver diseases

**f. Knowledge about subject**

**g. Skills** - The clinical examination methods.

Nasogastric tube placement

Sangstaken Tube placement,

Ascetic tap

Introduction to Endoscopy ,Colonoscopy ,ERCP ,Liver Biopsy

**h. Attitude** towards clinical state of patient judged by Consent for examination &tests , Empathy and Respect for Privacy, Autonomy&confidentiality of patient , Element of Humanity,Ethics & Justice

**i.Counseling** regarding diagnosis , Management ,prognosis , prevention & follow up.

**j.TOS formation.**

**LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding Gastrointestinal Diseases</u></b>	<b><u>PI</u></b>	

<u>As listed above</u>		
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## **SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>GIT Systemic &amp; Relevant General Physical Examination</u></b>	<b><u>PI</u></b>	
Nasogastric tube placement	<b><u>A</u></b>	
Sangstaken Tube placement	<b><u>O</u></b>	
Ascetic tap	<b><u>A</u></b>	
Endoscopy ,Colonoscopy, ERCP	<b><u>O</u></b>	
<b><u>Liver Biopsy</u></b>	<b><u>O</u></b>	

Should be able to diagnose and initiate management plan		
<b><u>Regarding Gastrointestinal Diseases</u></b>		
<b><u>As listed above</u></b>	<b><u>PI</u></b>	

## **Mode of Information transfer & assessment tools for competencies:**

<b>Learning outcome</b>	<b>Mode of information transfer</b>	<b>Assessment tool</b>
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as

		per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test,Class tests MCQ,SAQ,LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

## 6.Course Title: NEUROLOGY

**a.Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration:** 5<sup>th</sup> year

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as high prevalence & incidence of diseases related to this system

(ii).Learning Outcome.

To identify the Neurological disorders on basis of history, clinical examination & investigations & plan& initiate relevant management.

e.Topics

### 1.Meningitis

- Bacterial.
- Tuberculous.
- Viral etc.

### 2.Brain abscess

### 3.Encephalitis

### 4.Hydrocephalus

### 5.Epilepsy and other convulsive disorders

### 6.Cerebrovascular diseases (stroke).

Infarction

- Ischemic
- Embolism

Haemorrhage

- Intra-cerebral
- Subarachnoid

### 7.Dementia and Alzheimer's disease.

### 8.Parkinson's disease and other movement disorders.

### 9.Motor neuron disease.

10. Multiple sclerosis.
11. Cranial nerve disorders.
12. Transient mono-ocular blindness
  - (amaurosis fugax).
13. Trigeminal neuralgia.
14. Facial palsy (Bell's).
15. Vertigo, nystagmus
16. Spinal cord disorders.
  - Spinal cord compression
  - Hemiplegia, paraplegia, quadriplegia
  - Myelitis.
  - Spondylosis.
  - Syringomyelia and syringobulbia.
17. Peripheral nerve disorders.
  - Peripheral polyneuropathy
  - Guillain Barrie syndrome
  - Mononeuritis multiplex.
18. Space occupying lesions of brain and spinal cord.
19. Muscular dystrophies
20. Myopathies, myasthenia gravis

**f. Knowledge** about subject

**g. Skills** - the clinical examination methods.

Lumbar puncture

Introduction to EEG, NCS, EMG , Sleep Study

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity , Ethics & Justice

**i. Counseling** regarding diagnosis , Management , prognosis, prevention & follow up.

**j. TOS formation.**

### **LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

### **LEARNING OUTCOMES**

Should be able to take relevant history

<b><u>Regarding Diseases of CNS</u></b>	<b><u>PI</u></b>	
<b><u>As listed above</u></b>		

### **SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>CNS Examination Systemic &amp; Relevant General Physical</u></b>	<b><u>PI</u></b>	
<b>Lumbar puncture</b>	<b><u>A</u></b>	
<b>EEG</b>	<b><u>O</u></b>	
<b>NCS,EMG</b>	<b><u>O</u></b>	
<b>Sleep Study</b>	<b><u>O</u></b>	
<b>Interpretation of related radiological investigations</b>	<b><u>PS</u></b>	

Should be able to diagnose and initiate management plan		
<b><u>Regarding Diseases of CNS as listed above</u></b>	<b><u>PI</u></b>	

### **Mode of Information transfer & assessment tools for competencies:**

<b>Learning outcome</b>	<b>Mode of information transfer</b>	<b>Assessment tool</b>
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency

		based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test,Class tests MCQ,SAQ,LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

## 7.Course Title: RHEUMATOLOGY

**a.Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration: 5<sup>th</sup> year**

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications as significant prevalence & incidence of joints related disorders.

(ii).Learning Outcome

To identify the Rheumatological diseases & complications on basis of history, clinical examination & investigations & plan& initiate relevant management.

**e.Topics**

- Osteoarthritis
- Osteoporosis
- Rheumatoid arthritis and related arthropathies
- Paget's disease of the bone.
- Osteopetrosis (marble bone disease).
- **Multi-System Immunological Diseases**
- Systemic lupus erythematosus (SLE)
- Serum sickness
- Systemic sclerosis (scleroderma).
- Mixed connective tissue diseases
- Sjogren's syndrome
- Ankylosing spondylitis.
- Bechet's syndrome
- Vasculitis syndromes .
- Anaphylactoid purpura
- Polyarteritis nodosa
- Hpersensitivity vasculitis



- Wegner's granulomatosis
- Temporal arteritis
- Takayasu's arteritis
- Thromboangitis obliterans (Burger's disease)
- Sarcoidosis

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods.

Joint Aspiration , Intra articular injection technique

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity , Ethics & Justice

**i. Counseling** regarding diagnosis , Management , prognosis, prevention & follow up.

**j. TOS formation.**

**LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding diseases of Locomotor</u></b>	<b><u>PI</u></b>	
<b><u>System as listed above</u></b>		

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>Locomotor system examination &amp;</u></b>		
<b><u>Relevant General Physical Examination</u></b>	<b><u>PI</u></b>	
<b><u>Joint Aspiration</u></b>	<b><u>O</u></b>	
<b><u>Intra articular injection technique</u></b>	<b><u>O</u></b>	

Should be able to diagnose and initiate management plan		
<b><u>Regarding diseases of Locomotor system</u></b>		

<u>As listed above</u>	<u>PI</u>	
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### Mode of Information transfer & assessment tools for competencies:

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class tests MCQ, SAQ, LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

### 8.Course Title: INFECTIOUS DISEASES

a. **Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

b. **Number of lectures:**

c. **Course Duration:** 5<sup>th</sup> year

d. **Aims and Objectives of the program**

(i). Rationale

Important clinical implications as significant prevalence & incidence of these diseases. Special emphasis on the infections common in Pakistan.

(ii). Learning Outcome.

To identify the various Infectious diseases & complications on basis of history, clinical examination & investigations & plan & initiate relevant management & Prevention Scheme.

## e.Topics:

Clinical syndromes.

- Sepsis and septic shock, meningococcaemia
- Acute infectious diarrhoeal diseases and bacterial foodpoisoning.
- Hospital acquired infections.
- Common disease syndromes caused by the following bacteria and their drug therapy.
- Pneumococci
- Staphylococci.
- Streptococci.
- Hemophilis influenzae.
- Shigella.
- Gonococci.
- Pseudomonas.
- Following diseases in detail.
- Tetanus.
- Enteric fever/salmonellosis.
- Cholera.
- Tuberculosis.
- Leprosy.
- Amoebiasis/giardiasis/trichomoniasis.
- Malaria.
- AIDS.
- Rabies.
- Infectious mononucleosis.
- Helminthic infestations
  - Ascariasis
  - Hookworm
  - Whipworm (trichuriasis)
  - Threadworm (entrobiasis)
  - Taenia (tapeworm)
  - Hydatid diseases

**f. Knowledge about subject**

**g. Skills** – the relevant clinical examination methods.

Procedures: Injection I/V, I/M, S/C, intradermal

Urinary catheterisation – collection of samples

Collection of blood samples/ blood film preparation

**h. Attitude:** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity ,Ethics & Justice

**i. Counseling** regarding diagnosis , Management ,prognosis, Prevention & follow up.

**j.TOS formation.**

**LEVEL OF LEARNING**

- Observer status (O)
- Assistant status (A)
- Perform under supervision (PS)
- Perform independently (PI)

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding Infectious diseases</u></b>	<b><u>PI</u></b>	
<b><u>as listed above</u></b>		

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>Relevant General &amp; Systemic Physical Examination</u></b>	<b><u>PI</u></b>	
Injection I/V, I/M, S/C, intradermal	<b><u>PI</u></b>	
Urinary catheterisation – collection of samples	<b><u>PS</u></b>	
Collection of blood samples/ blood film preparation	<b><u>PS</u></b>	
Branula	<b><u>PI</u></b>	
CVP	<b><u>A</u></b>	
• Aspiration of fluids (Pleural, Pericardial, Peritoneal, Knee) • Lumbar Puncture	<b><u>Q</u></b>	

Should be able to diagnose and initiate management plan		
<b><u>Regarding Infectious diseases</u></b>	<b><u>PI</u></b>	
<b><u>As listed above</u></b>		

### Mode of Information transfer & assessment tools for competencies:

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class tests MCQ, SAQ, LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
<b>Communication Skills</b>	<b>Bedside clinical teaching/Group discussions/Tutorials</b>	<b>Ongoing assessment by teachers/Bedside/TOACS</b>

### 9.Course Title: HAEMATOLOGY

**a.Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b.Number of lectures:**

**c.Course Duration: 5<sup>th</sup> year**

**d.Aims and Objectives of the program**

(i).Rationale

Important clinical implications of diseases related to this system

(ii).Learning Outcome.

To identify the Haematological disorders on basis of history, clinical examination & investigations & plan& initiate relevant management.

**e.Topics**

- Anaemias.

- Classification
- Iron deficiency
- Megaloblastic
  - B-12 deficiency
  - Folic acid deficiency
- Anaemia of chronic disorder
- Haemolytic anaemia
  - Hereditary
  - Acquired
    - Intra-corporal
    - Extra-corporal
- Aplastic anemia
- Haemoglobinopathies.
  - Sickle cell syndromes
  - Thalassaemias
- Myeloproliferative diseases.
  - Chronic myeloid leukemia (CML)
  - Polycythemia vera
  - Myelofibrosis
  - Essential thrombocythosis
- Leukemias.
  - Acute
  - Chronic
- Lymphomas
  - Non-Hodgkin's
  - Hodgkin's
- Blood groups and blood transfusion.
- Bone marrow transplantation.
- Disorders of haemostasis.
  - Thrombocytopenia
  - Idiopathic thrombocytopenic purpura (ITP)
  - Von Willebrand's disease.
- Vessel wall disorders.

- Disorders of coagulation.
  - Haemophilia
  - Vitamin K deficiency.
  - Disseminated intravascular coagulation (DIC).
- Anticoagulants Therapy
  - Heparin
  - Oral (warfarin etc.)
  - Vit. K infusion
- Antiplatelet drugs

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods.

Injection I/V, I/M, S/C, intradermal

Collection of samples of blood/blood film preparation

Placement of I/V lines/fluids/blood/blood products, direct branula,

CVP line placement,

Observe bone marrow aspiration/ trephine

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity ,Ethics & Justice

**i. Counseling** regarding diagnosis , Management ,prognosis , prevention & follow up.

**j. TOS formation.**

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding diseases as listed above</u></b>	<b><u>PI</u></b>	

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>Systemic &amp; relevant general physical Examination</u></b>	<b><u>PI</u></b>	
<b><u>Injection I/V, I/M, S/C, intradermal</u></b>	<b><u>PI</u></b>	

<u>Collection of samples of blood/blood film preparation</u>	<u>PS</u>	
<u>Placing I/V lines/fluids/blood/blood products, direct branula</u>	<u>A</u>	
<u>CVP line placement</u>	<u>O</u>	
<u>Bone marrow aspiration/ trephine</u>	<u>O</u>	

should be able to diagnose and initiate management plan

<u>Regarding diseases as listed above</u>	<u>PI</u>	
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### Mode of Information transfer & assessment tools for competencies:

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class tests MCQ, SAQ, LEQ
Practical procedures	Videos/practical demonstration/practice on manikins	Ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Communication Skills	Bedside clinical teaching/Group discussions/Tutorials	Ongoing assessment by teachers/Bedside/TOACS

### 10.Course Title: DERMATOLOGY



**a. Teaching Hours:** Duration of Lecture 50 minutes, Practical 5 hours.

**b. Number of lectures:**

**c. Course Duration:** 5<sup>th</sup> year

**d. Aims and Objectives of the program**

(i).Rationale

Important clinical implications as significant prevalence & incidence of these diseases . Special emphasis on the diseases common in Pakistan.

(ii).Learning Outcome.

To identify the various Skin Disorders & complications on basis of history, clinical examination & investigations & plan & initiate relevant management.

**e.Topics:**

- Anatomy, physiology of skin related to clinical dermatology
- Infestations: scabies, pediculosis.
- Bacterial and mycobacterial infections
- Fungal and viral diseases.
- Acne vulgaris
- Eczemas.
- Psoriasis
- Lichen planus
- Bullous disorders.
- Pigmentary disorders
- Disorders of nails.
- Disorders of hairs.
- Sexually transmitted diseases.

Identifying Lesions of:

- Leprosy
- Syphilitic lesions (chancre, secondary syphilis, gumma)
- Tinea (corporis, capitis, inguinale, unguam)
- Candida (oral, skin)
- Scabies
- Lice
- Mosquito bite
- Acute & chronic eczema
- Lesions of small pox, chicken pox, herpes simplex,herpes zoster
- SLE.
- Psoriasis
- Lichen planus
- Impetigo contagiosum
- Moluscumcontagiosum
- Acne vulgaris
- Seborrhoea
- Exfoliative dermatitis
- Skin neoplasm like squamous cell cacinoma, basal cellcarcinoma and melanoma
- Leukoderma
- Pityriasisversicolor

- Alopecia and hirsutism
- Sexually transmitted diseases
- Furunculosis, cellulitis
- Drug eruption

**f. Knowledge about subject**

**g. Skills** - the clinical examination methods, to identify lesions specific to various skin diseases

Scraping for fungus

Use of magnifying glass

Skin biopsy

Use of Wood's lamp

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests, Empathy and Respect for Privacy, Autonomy & confidentiality of patient, Element of Humanity, Ethics & Justice

**i. Counseling** regarding diagnosis, Management, prognosis, prevention & follow up.

**j. TOS formation.**

**LEARNING OUTCOMES**

Should be able to take relevant history		
<b><u>Regarding diseases as listed above</u></b>	<b><u>PI</u></b>	

**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<b><u>Systemic &amp; relevant general physical Examination to identify specific skin lesions</u></b>	<b><u>PI</u></b>	
<b><u>Use of magnifying glass</u></b>	<b><u>PI</u></b>	
<b><u>Scraping for fungus</u></b>	<b><u>PS</u></b>	
<b><u>Skin biopsy</u></b>	<b><u>O</u></b>	
<b><u>Use of Wood's lamp</u></b>	<b><u>PS</u></b>	

should be able to diagnose and initiate management plan		
<b><u>Regarding diseases as listed above</u></b>	<b><u>PI</u></b>	

### Mode of Information transfer & assessment tools for competencies:

Learning outcome	Mode of information transfer	Assessment tool
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Physical examination	Bedside clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test, Class tests MCQ, SAQ, LEQ

## 11. Course Title: PSYCHIATRY

a. Teaching Hours: Duration of Lecture 50 minutes, Practical 5 hours.

b. Number of lectures:

**c. Course Duration: 5<sup>th</sup> year**

**d. Aims and Objectives of the program**

(i). Rationale

Important clinical and social implications as high prevalence & incidence of diseases related to this system

(ii). Learning Outcome

To identify the Psychiatric Ailments on basis of history, Mental state and clinical examination, investigations then plan & initiate relevant management.

**e. Topics**

- **Mood disorders.**

- Major depressive episodes

- Unipolar

- Bipolar
- Dysthymic
- Atypical
  - Maniac episodes

• Anxiety disorders.

- Acute anxiety states
- Panic disorders
- Generalized anxiety disorders
- Post Trauma somatic disorders
- Obsessive-compulsive disorders
- Phobic disorders
- Schizophrenia.
- Alcoholism.
- Addiction.

Eating Disorders

- Psychosexual disorders in men and women.

Dementia

**f. Knowledge about subject**

**g. Skills** – the mental state examination

Counseling and psychoanalysis especially in patients with suicidal and homicidal attitude.

Procedures:

- Psychotherapy; CBT, Behavioral therapy, Interpersonal/family therapy
- Electroconvulsive Therapy (ECT)
- Electroencephalogram (EEG)

**h. Attitude** towards clinical state of patient judged by Consent for examination & tests , Empathy and Respect for Privacy, Autonomy & confidentiality of patient , Element of Humanity , Ethics & Justice

**i. Counseling** regarding diagnosis , Management & follow up.

**j. TOS formation.**

**LEARNING OUTCOMES**

Should be able to take relevant history
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<u>Regarding diseases as listed above</u>	<u>PI</u>
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**SHOULD BE ABLE TO PERFORM EXAMINATION & PROCEDURES**

Should be able to perform		
<u>Systemic &amp; relevant general physical Examination to identify mental state</u>	<u>PI</u>	
<u>Psychotherapy; CBT, Behavioral therapy, Interpersonal/family therapy</u>	<u>O</u>	
<u>ECT</u>	<u>O</u>	
<u>EEG</u>	<u>O</u>	
<u>Counseling and psychoanalysis especially in patients with suicidal and homicidal attitudes</u>	<u>O</u>	

should be able to diagnose and initiate management plan	
<u>Regarding diseases as listed above</u>	<u>PI</u>

**Mode of Information transfer & assessment tools for competencies:**

<b>Learning outcome</b>	<b>Mode of information transfer</b>	<b>Assessment tool</b>
History taking	Bedside clinical teaching, Long cases, Short cases	Case presentation & discussion/ongoing assessment by teachers and documented in ward card) ward test (format as per competency based learning curriculum)
Mental state examination	Bedside, clinical teaching/ Videos	Demonstration of physical examination skills under supervision/ ongoing assessment by teachers (to be documented in ward card) ward test (format as per competency

		based learning curriculum)
Awareness Regarding relevant investigations & management principles	Bedside clinical teaching/Lectures/Group discussion/Tutorials	Case presentation & discussion/ongoing assessment by teachers (to be documented in ward card) ward test,Class tests MCQ,SAQ,LEQ
Communication Skills	Bedside teaching, Role modelling	OSCE,360° evaluation

## 12. MISCELLANEOUS Topics

- Heat stroke
- Snake bite
- Electric shock
- Poisoning etc.

### THE LOG BOOK/CLINICAL CARD RECORD

The student is expected to make a record of his/her achievements in the log book. The log book is a collection of evidence that learning has taken place, it is a reflective record of achievements. The log book shall also contain a record of the procedures which student would have performed in 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup> year.

Visit the hospital ward and take history. Review the laboratory investigations of these patients to find links among certain findings and their clinical picture.

Write down your own reflection on the above results in relation to the clinical findings of these patients in the following table:

Patient ID#	Major findings			Self reflection	Teachers comment
	History	Clinical	Labs		
1.					
2.					
3.					
4.					

5.			
6.			
7.			
8.			
9.			
10.			

**Department of Medicine, CMH Lahore Medical College**

**List of Lectures in Medicine for Final Year MBBS 2022-23**

**Days/Timings:**      **Tuesdays (08:50-09:40)**                      **Thursdays: (08:00-08:50 and 09:40-10:30)**  
**Fridays: (08:00-08:50)**    **Venue: Lecture Hall-F**

Sr. No	Date/Time	Topic	Instructor
1	01-11-2022 (08:50-09:40)	Introduction to Clinical Medicine	Prof. Muhammad Siddique
2	03-11-2022 (08:00-08:50)	ECG	Brig. Ayaz Ahmed
3	03-11-2022 (09:40-10:30)	Evaluation of a Jaundiced Patient	Dr. Hala Mansoor
4	04-11-2022 (08:00-08:50)	IHD-I	Brig. Ayaz Ahmad
5	08-11-2022 (08:50-09:40)	IHD-II	Col. Sajjad Hussain
6	10-11-2022 (08:00-08:50)	Hypertension	Prof. Rizwana Kitchlew
7	10-11-2022 (09:40-10:30)	History Taking Skills	Brig. Zill-e- Humayun Mirza
8	11-11-2022 (08:00-08:50)	Chronic Hepatitis	Prof. Muhammad Siddique
9	15-11-2022 (08:50-09:40)	Mitral valve disease	Dr..Ahmed Usman
10	17-11-2022 (08:00-08:50)	Aortic valve disease	Col. Sajjad Hussain
11	17-11-2022 (09:40-10:30)	Dysphagia & Odynophagia	Prof. Muhammad Siddique
12	18-11-2022 (08:00-08:50)	Upper GI Bleed	Prof. Muhammad Siddique

13	22-11-2022 (08:50-09:40)	Heart Failure (LVF+CCF)	Dr. Fraz Ahmed
14	24-11-2022 (08:00-08:50)	Achalasia /DES+ Infectious and corrosive esophagitis	Prof. Muhammad Siddique
15	24-11-2022 (09:40-10:30)	Myocarditis and Cardiomyopathy	Maj. Gen Farhan Tuyyab
16	25-11-2022 (08:00-08:50)	Nuclear medicine in Cardiology	Lt. Col. Saima Seher
17	29-11-2022 (08:50-09:40)	Infective endocarditis	Maj. Gen. Farhan Tuyyab
18	01-12-2022 (08:00-08:50)	Lipid disorders /Dyslipidemia	Dr. Samina Fida
19	01-12-2022 (09:40-10:30)	Chronic Hepatitis (CBL)	Prof. Muhammad Siddique
20	02-12-2022 (08:00-08:50)	GERD	Prof. Muhammad Siddique
21	06-12-2022 (08:50-09:40)	Pericarditis + Cardiac temporade	Brig. Ayaz Ahmad
22	08-12-2022 (08:00-08:50)	Heart blocks	Col. Sajjad Hussain
23	08-12-2022 (09:40-10:30)	Lower GI bleed (CBL)	Prof. Muhammad Siddique
24	09-12-2022 (08:00-08:50)	Atrial and Ventricular arrhythmias	Dr. Hafiz Muhammad Farhan Siddique
25	13-12-2022 (08:50-09:40)	Heart disease in pregnancy and surgery	Dr. Aneela Afreen
26	15-12-2022 (08:00-08:50)	Shock (Classification and Management)	Dr. Fraz Ahmad
27	15-12-2022(09:40-10:30)	Complications of Cirrhosis Ascites+SBP+HRS (CBL)	Prof. Muhammad Siddique
28	16-12-2022 (08:00-08:50)	Fulminant Hepatic Failure/Hepatic Encephalopathy	Prof. Muhammad Siddique
29	20-12-2022 (08:50-09:40)	Wilson disease/Hemochromatosis	Prof. Muhammad Siddique
30	22-12-2022 (08:00-08:50)	HCC+ Liver Transplant	Prof. Muhammad Siddique
31	22-12-2022 (09:40-10:30)	Pneumonia (CBL)	Brig. Zill-e-Humayun Mirza
32	23-12-2022 (08:00-08:50)	Liver Abscess	Prof. Muhammad Siddique
<b>Winter Holidays 26 Dec to 30 Dec 2022</b>			
33	03-01-2023 (08:50-09:40)	Pneumonia	Brig. Zill-e-Humayun Mirza
34	05-01-2023 (08:00-08:50)	Metabolic syndrome including NAFLD and Obesity	Prof. Muhammad Siddique
35	05-01-2023 (09:40-10:30)	Autoimmune Hepatitis (AIH+PBC+PSC) (CBL)	Prof. Muhammad Siddique
36	06-01-2023 (08:00-08:50)	Nuclear medicine in Gastroenterology	Lt. Col. Saima Seher
37	10-01-2023 (08:50-09:40)	Bronchiectasis	Brig. Javed Iqbal (R)
38	12-01-2023 (08:00-08:50)	Liver Disease in Pregnancy	Dr. Hala Mansoor



39	12-01-2023 (09:40-10:30)	Peptic Ulcer (CBL)	Prof. Muhammad Siddique
40	13-01-2023 (08:00-08:50)	Bronchial Asthma	Brig. Zill-e-Humayun Mirza
41	17-01-2023 (08:50-09:40)	Inflammatory Bowel Disease-I	Prof. Muhammad Siddique
42	19-01-2023 (08:00-08:50)	Inflammatory Bowel disease-II	Prof. Muhammad Siddique
43	19-01-2023 (09:40-10:30)	COPD (CBL)	Brig. Javed Iqbal (R)
44	20-01-2023 (08:00-08:50)	Acute Diarrhea	Prof. Muhammad Siddique
45	24-01-2023 (08:50-09:40)	Acute Pancreatitis	Prof. Muhammad Siddique
46	26-01-2023 (08:00-08:50)	Pulmonary Hypertension	Brig. Zill-e-Humayun Mirza
47	26-01-2023 (09:40-10:30)	Chronic Diarrhea/Malabsorption/Celiac disease (CBL)	Prof. Muhammad Siddique
48	27-01-2023 (08:00-08:50)	Chronic Pancreatitis	Prof. Muhammad Siddique
49	31-01-2023 (08:50-09:40)	ILD/DPLD	Prof. Rizwana Kitchlew
50	02-02-2023 (08:00-08:50)	Dengue Fever	Maj. Gen Nadeem Fazal
51	02-02-2023 (09:40-10:30)	Tuberculosis	Brig. Zill-e-Humayun Mirza
52	03-02-2023 (08:00-08:50)	Pleural Effusions	Brig. Zill-e-Humayun Mirza
53	07-02-2023 (08:50-09:40)	Malaria	Maj. Gen Nadeem Fazal
54	09-02-2023 (08:00-08:50)	CA Lung	Dr. Samina Fida
55	09-02-2023 (09:40-10:30)	Respiratory Failure/ARDS (CBL)	Dr. Samina Fida
56	10-02-2023 (08:00-08:50)	Enteric Fever	Maj. Gen. Nadeem Fazal
57	14-02-2023 (08:50-09:40)	Sarcoidosis	Brig. Zill-e-Humayun Mirza
58	16-02-2023 (08:00-08:50)	Brucellosis /Infectious Mononucleosis	Prof. Rizwana Kitchlew
59	16-02-2023 (09:40-10:30)	HIV	Lt. Col. Naghmana Mudassar
60	17-02-2023 (08:00-08:50)	Nuclear medicine in Radiology	Lt. Col. Saima Seher
61	21-02-2023 (08:50-09:40)	Sexually transmitted diseases	Lt. Col. Naghmana Mudassar
62	23-02-2023 (08:00-08:50)	COVID-19	Brig. Faheem ur Rehman
63	23-02-2023 (09:40-10:30)	DVT+ Pulmonary embolism (CBL)	Brig. Javed Iqbal (R)
64	24-02-2023 (08:00-08:50)	Headache/Migraine	Col. Muhammad Ali Yousaf
<b>Sports week (Tentatively)</b>			<b>27 Feb to 02 March 2022</b>
65	28-02-2023 (08:50-09:40)	Toxoplasmosis/cryptococcal infection	Prof. Rizwana Kitchlew
66	02-03-2023 (08:00-08:50)	Myelofibrosis and MDS	Dr. Saba Saif
67	03-03-2023 (08:00-08:50)	Guide to immunization in adults	Dr. Saba Saif
<b>Final Sports Day</b>			<b>07 March 2023</b>

68	09-03-2023 (08:00-08:50)	Epilepsy	Col. Muhammad Ali Yousaf
69	09-03-2023 (09:40-10:30)	Assessment of renal disease	Brig. Zahid Farooq Baig
70	10-03-2023 (08:00-08:50)	Meningitis(classification, presentation and management)	Col. Muhammad Ali Yousaf
71	14-03-2023 (08:50-09:40)	Cerebellar Diseases	Brig. Javed Iqbal (R)
72	16-03-2023 (08:00-08:50)	CVA-I (Thrombotic and Embolic)	Col. Muhammad Ali Yousaf
73	16-03-2023 (09:40-10:30)	Nephrotic Syndrome	Lt. Col. Naveed Ahmed Shah
74	17-03-2023 (08:00-08:50)	CVA-II (Hemorrhagic including SAH)	Col. Muhammad Ali Yousaf
<b>Spring Holidays 20 March to 26 March 2023</b>			
<b>Midterm Exam 27 March 2023 to 31 March 2023</b>			
<b>Medicine Paper 28 March 2023</b>			
75	04-04-2023 (08:50-09:40)	Tubulointerstitial Disease	Lt. Col. Naveed Ahmed Shah
76	06-04-2023 (08:00-08:50)	Renal infections including TB	Lt. Col. Naveed Ahmed Shah
77	06-04-2023 (09:40-10:30)	Brain abscess and SOL/ Encephalitis (CBL)	Dr. Hala Mansoor
78	07-04-2023 (08:00-08:50)	Glomerulonephritis & Acute Kidney injury	Lt. Col. Naveed Ahmed Shah
79	11-04-2023 (08:50-09:40)	Radiology in Neurological diseases	Lt. Col. Yasser Khan
80	13-04-2023 (08:00-08:50)	Neuropathies	Dr. Hala Mansoor
81	13-04-2023 (09:40-10:30)	Motor Neuron Disease / Dementia	Col. Muhammad Ali Yousaf
82	14-04-2023 (08:00-08:50)	Chronic Kidney Disease	Brig. Zahid Farooq Baig
83	18-04-2023 (08:50-09:40)	Parkinsonism	Prof. Rizwana Kitchlew
84	20-04-2023 (08:00-08:50)	Renal Replacement/transplant	Brig. Zahid Farooq Baig
85	20-04-2023 (09:40-10:30)	GB syndrome (CBL)	Dr. Saba Saif
86	21-04-2023 (08:00-08:50)	Bells palsy & Bulbar palsy	Maj. Gen Nadeem Fazal
<b>Eid Ul Fitar (Tentatively) 24 April to 26 April 2023</b>			
87	27-04-2023 (08:00-08:50)	Acid Base + RTA	Lt. Col. Naveed Ahmed Shah
88	27-04-2023 (09:40-10:30)	Myasthenia gravis	Prof. Rizwana Kitchlew
89	28-04-2023 (08:00-08:50)	Radiology in GI & Resp Diseases	Lt. Col. Yasser Khan
<b>Labour Day 01 May 2023</b>			
90	02-05-2023 (08:50-09:40)	Blood Products principles of replacements and adverse reactions	Dr. Hala Mansoor
91	04-05-2023 (08:00-08:50)	Electrolyte imbalance-Sodium disorders (SIADH )	Brig. Zahid Farooq Baig

92	04-05-2023 (09:40-10:30)	ITP	Prof. Muhammad Siddique
93	05-05-2023 (08:00-08:50)	Electrolyte imbalance-II	Brig. Zahid Farooq Baig
94	09-05-2023 (08:50-09:40)	Nuclear Medicine in Nephrology & Endocrine disorders	Lt. Col. Saima Seher
95	11-05-2023 (08:00-08:50)	Acute Leukemia	Col. Faisal Mehmood
96	11-05-2023 (09:40-10:30)	SLE	Dr. Saba Saif
97	12-05-2023 (08:00-08:50)	Multiple sclerosis	Col. Muhammad Ali Yousaf
98	16-05-2023 (08:50-09:40)	Hemolytic uremic syndrome, TTP and DIC	Brig. Faheem ur Rehman
99	18-05-2023 (08:00-08:50)	Polycythemia	Brig. Faheem ur Rehman
100	18-05-2023 (09:40-10:30)	Lymphomas / Non Hodgkins	Col. Faisal Mehmood
101	19-05-2023 (08:00-08:50)	Diabetes Mellitus Overview	Maj. Gen Nadeem Fazal
102	23-05-2023 (08:50-09:40)	Aplastic anemia	Col. Faisal Mehmood
103	25-05-2023 (08:00-08:50)	Multiple Myeloma	Col. Faisal Mehmood
104	25-05-2023 (09:40-10:30)	CML	Col. Faisal Mehmood
105	26-05-2023 (08:00-08:50)	Complications of Diabetes (microvascular & macrovascular)	Maj. Gen Nadeem Fazal
106	30-05-2023 (08:50-09:40)	Metabolic Complications (Hyperglycemic Hyperosmolar state HHS & Diabetic Ketoacidosis, Hypoglycemia)-I	Prof. Rizwana Kitchlew
107	01-06-2023 (08:00-08:50)	CLL	Col. Faisal Mehmood
108	01-06-2023 (09:40-10:30)	Diabetes mellitus metabolic complications-II	Prof. Rizwana Kitchlew
109	02-06-2023 (08:00-08:50)	Hypopituitarism & Diabetes Insipidus	Brig. Faheem ur Rehman
110	06-06-2023 (08:50-09:40)	RA	Dr. Saba Saif
111	08-06-2023 (08:00-08:50)	Systemic Sclerosis	Dr. Saba Saif
112	08-06-2023 (09:40-10:30)	GOUT/Pseudogout (CBL)	Dr. Saba Saif
113	09-06-2023 (08:00-08:50)	Diabetes Mellitus-II Treatment non pharmacologic and pharmacologic	Prof. Rizwana Kitchlew
114	13-06-2023 (08:50-09:40)	Hypothyroidism Hyperthyroidism management	Prof. Rizwana Kitchlew
115	15-06-2023 (08:00-08:50)	Addison's disease	Maj. Gen Nadeem Fazal
116	15-06-2023 (09:40-10:30)	Seronegative Arthritis/Ankylosing spondylitis	Dr. Saba Saif
117	16-06-2023 (08:00-08:50)	Cushing disease	Maj. Gen Nadeem Fazal

118	20-06-2023 (08:50-09:40)	Parathyroid Disease	Dr. Saba Saif
119	22-06-2023 (08:00-08:50)	Vasculitis-Wegeners, Churg strauss	Dr. Saba Saif
120	22-06-2023 (09:40-10:30)	Pheochromocytoma & Conn's Syndrome (CBL)	Dr. Hala Mansoor
121	23-06-2023 (08:00-08:50)	Osteoporosis/Osteomalacia	Dr. Saba Saif
<b>Eid Ul Adha 26 June to 30 June 2023</b>			
122	04-07-2023 (08:50-09:40)	MEN I & II	Brig Faheem ur Rehman
123	06-07-2023 (08:00-08:50)	Radiology in Rheumatological disorders	Lt. Col. Yasser Khan
124	06-07-2023 (09:40-10:30)	Paracetamol Poisoning	Col. Rafi ud Din
125	07-07-2023 (08:00-08:50)	PMR/polymyositis	Dr. Saba Saif
126	11-07-2023 (08:50-09:40)	Snake Bite	Prof. Muhammad Siddique
127	13-07-2023 (08:00-08:50)	MCTD & Sjogren's Syndrome	Dr. Saba Saif
128	13-07-2023 (09:40-10:30)	Revision	Prof. Rizwana Kitchlew
129	14-07-2023 (08:00-08:50)	Revision	Brig. Javed Iqbal (R)
<b>Summer Vacations 17 July to 11 August 2023</b>			
<b>Independence Day 14 August 2023</b>			
<b>Pre-Annual Exam / OSPE 15 Aug to 24 Aug 2023</b>			
<b>Medicine Paper (written) 15 August 2023</b>			
<b>OSPE 21 Aug to 24 Aug 2023</b>			
<b>Prep Leave for Prof. Exam 25 Aug to 17 Sep 203</b>			
<b>NUMS Annual Exam Date 18 Sep 2023</b>			

The Lecture should start with a Clinical Scenario followed by Interactive Session.

Prof. Dr. Muhammad Siddique  
Head Department of Medicine  
CMH Lahore Medical College

**DEPARTMENT OF MEDICINE, CMH LAHORE MEDICAL COLLEGE**  
**AMENDED-CLINICAL TEACHING SCHEDULE FOR FINAL YEAR MBBS 2022-23 (MORNING)**  
**(w.e.f. 07-12-2022)**

<b>Days</b>	<b>Time</b>	<b>Topics</b>	<b>Medical-I</b>	<b>Medical-II</b>
Monday	11:00 to 12:30	<b>Problem based learning</b> Case Discussion	Prof. Rizwana Kitchlew (0301-8438002)	Lt. Col. M. Adnan Manzar (0345-5109608)
	12:30 to 02:00	<b>Problem based learning</b> Clinical methods/ Drugs/Instruments/Xray	Prof. Muhammad Siddique (0321-8422933)	Col. Rafi Ud Din (0333-4099057)
	02:00 to 02:02:45	<b>Self-Learning, Preparation of the case for next day</b>		
Tuesday	11:00 to 12:30	<b>Problem based learning</b> Case Discussion	Lt. Col. Muhammad Ali Yousaf (0321-5562666)	Col. Faisal Mehmood (0330-4091155)
	12:30 to 02:00	<b>Problem based learning</b> Clinical methods/ Drugs/Instruments/Xray	Brig. Zill e-Humayun Mirza (0333-7824309)	Maj. Gen. Nadeem Fazal TI(M) (0321-4909532)
	02:00 to 02:02:45	<b>Self-Learning, Preparation of the case for next day</b>		
Wednesday	11:00 to 12:30	<b>Problem based learning</b> Case Discussion	Prof. Rizwana Kitchlew (0301-8438002)	Lt. Col. M. Adnan Manzar (0345-5109608)
	12:30 to 02:00	<b>Problem based learning</b> Clinical methods/	Prof. Muhammad Siddique (0321-8422933)	Lt. Col. Arshad Hayat (0321-5299491)

		Drugs/Instruments/Xray		
	02:00 to 02:02:45	<b>Self-Learning, Preparation of the case for next day</b>		
Thursday	11:00 to 12:30	<b>Problem based learning</b> Case Discussion	Brig. M. Faheem ur Rehman Khan (0321-5500120)	Maj. Gen. Nadeem Fazal TI(M) (0321-4909532)
	12:30 to 02:00	<b>Problem based learning</b> Clinical methods/ Drugs/Instruments/Xray	Col. Muhammad Ilyas (0321-3874953)	Col. Rafi-ud- Din (0333-4099057)
	02:00 to 02:02:45	<b>Self-Learning, Preparation of the case for next day</b>		
Friday	10:30 to 12:30		Brig. Javed Iqbal (R) 0334-5414590	Lt. Col. Arshad Hayat (0321-5299491)

\*On the first day of 1<sup>st</sup> rotation orientation regarding medical ward, equipment, students and patient safety will be given.

Prof. Dr. Muhammad Siddique  
Head of Medicine Department  
CMH Lahore Medical College

**DEPARTMENT OF MEDICINE, CMH LAHORE MEDICAL COLLEGE**

**AMENDED-CLINICAL TEACHING SCHEDULE FOR FINAL YEAR MBBS 2022-23**

**(AFTERNOON) (w.e.f 15-05-2023)**

**TIMINGS: (03:00PM TO 05:00PM)**

Day	Final Year	Supervision by
Monday	Dr. Mavery Amin (0342-5707246) (Medical unit-I)	Dr. Sahar Farzand
	Dr. Navaal Anjum (0320-6320500) (Medical unit-II)	
Tuesday	Dr. Saira Ashraf (0332-8371697) (Medical unit-I)	Dr. Sahar Farzand
	Dr. Aqsa Javaid (0332-3322598) (Medical unit-II)	
Wednesday	Dr. Sofia Anwar (0309-6773489) (Medical unit-I)	Dr. Sahar Farzand
	Dr. Maheen Zahid (Medical unit-II)	

	(0344-2224666)	
Thursday	Dr. Umair Ahmed (0332-7783858) Dr. Sardar Zeeshan 0331-1417607)	(Medical unit-I)  (Medical unit-II)
		Dr. Sahar Farzand

- Adherence to timings is requested
- All faculty members requested to follow the clinical teaching schedule

**Dr. Muhammad Siddique**  
**Prof. Head Department of Medicine**  
**CMH Lahore Medical College**

### **e) Learning Resources:**

- Library : books ,Journals and Internet
- Medical Wards
- OPDs
- Classroom

Student should follow this study guide to learn about the various topics listed in the courses from different resources including formal lectures, literature search, clinical bedside teaching along with performing certain activities to learn on your own through meeting clinicians, performing community based assignments visiting different departments of the hospital along with writing down your own reflections.

### **f) Other Learning Resources**

#### **RECOMMENDED BOOKS:**

1. **Practice of Medicine** by Davidson.

2. **Clinical Medicine** by Parveen J Kumar & Michael, Clark
3. **Hutchison's Clinical Methods** by Michael Swash. 21st edition Davidson's
4. **Current Medical Diagnosis and Treatment**
5. **Oxford Handbook of Clinical Medicine**
6. **Macleod Clinical Methods**
7. **Basic psychiatry** by MyreSim, e. B. Gordon
8. **Oxford Text Book of Psychiatry**
9. **ABC of Dermatology**. Latest Edition.
10. **Smith's General Urology** by Emil A. Tanagho and Jack W. McAninch 15th edition. 2007 VI.
11. **Reference Book**
  - a) Harrison Clinical Methods
12. **Online Journals and Reading Materials** through HEC Digital Library Facility
13. Video Links: <http://www.medcram.com/>, <http://www.medtube.net/>

## **g) SUMMATIVE ASSESSMENT METHODS AND POLICIES**

### **Internal Assessment**

- a. Weightage of internal assessment shall be 10 %, each for theory and practical, in MBBS Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / assignments / class presentation / send-ups / class tests / OSPE etc.
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute .
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations.

### **Annual Examination**

- a. The weightage of Annual Examination shall be 90%, each for theory and practical, in MBBS.
- b. The examination comprises of a theory paper and practical/clinical examinations as per PM&DC regulations and the Table of Specifications (TOS) of the University.
- c. The gap between two consecutive theory papers shall not be more than two days.



- d. The Theory Paper shall be of 3-hours duration, held under the arrangements of the university. It shall have two parts; MCQs and SEQs for the year 2023. It may be changed after the approval of Academic Council.

## Distribution of subjects

### *Paper-I will include:*

• Dermatology
• Poisoning/animal bites
• Nutrition/obesity/ Cholesterol • related & Genetic disorders
• Neurology/muscle disorders
• Gastroenterology
• Liver/pancreas
• Rheumatology/bones
• Endocrinology
• Diabetes

### *Paper-II will include:*

• Psychiatry & Mental Health
• Haematology & transfusion medicine
• Cardiovascular system
• Pulmonology
• Nephrology, Dialysis & Transplant
• Infections
• Oncology, Diseases of Lymph Nodes & Bone Marrow
• Critical Care & emergency
• Pharmacotherapeutics

### • **Pass Marks**

- Pass marks for all subjects shall be 50 % in theory and practical, separately.
- No grace marks shall be allowed to any student in any examination.

**i) Table of specification**

**Pre-Annual/Final Professional Examination (Theory)**

**MEDICINE PAPER – I (2023)**

Time Allowed	03 hrs. <i>(Including MCQs)</i>
<b><u>MCQs:</u></b>	
a) Time Allowed	(80 Mins)
b) Total Questions (80)	Single best out of 4 options
c) Marks (1 mark each x 80)	80 marks
<b><u>SAQs/SEQs:</u></b>	
a) Time Allowed	(100 Mins)
b) Total Questions	10
c) Marks (07 marks each x 10)	70
d) Internal Assessment (10%)	15
✓ Total Marks	150
✓ Pass Marks	75

<b>Topics</b>	<b>Number of MCQs (80) Recall: 25 Application: 55</b>	<b>Number of SAQs/SEQs (7 mark each)</b>
Dermatology	10	1
Poisoning/animal bites	04	2
Nutrition/obesity/ Cholesterol related & Genetic disorders	09	
Neurology/muscle disorders	10	1
Gastroenterology	10	1
Liver/pancreas	08	1
Rheumatology/ bones	12	2
Endocrinology	10	1
Diabetes	07	1
<b>Total</b>	<b>80 (80)</b>	<b>10(70)</b>

## Pre-Annual/Final Professional Examination (Theory)

### MEDICINE PAPER – II (2023)

Time Allowed	03 hrs. (Including MCQs)
<b>MCQs:</b>	
• Time Allowed	(80 mins)
• Total Questions (80)	Single best out of 4 options
• Marks (1 mark each x 80)	80 marks
<b>SAQs/SEQs:</b>	
• Time Allowed	(100 Mins)
• Total Questions	07
• Marks (10 marks each x 7)	70
• Internal Assessment (10%)	15
✓ Total Marks	150
✓ Pass Marks	75

Topics	Number of MCQs (80) Recall: 25 Application: 55 (1 mark each)	Number of SAQs/SEQs (10)  (07 mark each)
Psychiatry & Mental Health	11	1
Haematology & Transfusion Medicine	10	2
Cardiovascular system	09	1
Pulmonology	12	2
Nephrology, Dialysis & Transplant	10	1
Infections	10	1
Oncology, Diseases of Lymph Nodes & Bone Marrow	08	1
Critical Care & emergency	06	1
Pharmacotherapeutics	4	-
<b>Total</b>	<b>80 (80)</b>	<b>10 (70)</b>

## Table of Specification for Practical Examination- Medicine 2020

Max Marks = 270

Internal Assessment =

30

✓ **Grand Total** = 300

✓ **Pass Marks** = 150

CYCLE I (OSCE)												CYCLE II (in ward)						
8 x Non-Observed Static Stations								04 x Observed Static Station				04 x Short Case				1 x Long Case Observed & Structured		
1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4			
Procedural skills/Diagnostic skills								Exam skills		Communication skills		Management skills		Exam skills				
DP/TP	IATF	TP	IATF	IATF	TP	IATF	IATF	SI	SI	OC		TP		CE				HT, CE, Clinical reasoning
Patient Safety/ Infection control	Picture	Drug	EKG	X-Ray/ CT Scan	Instruments	Haem Data Interpretatio	Endo Data Interpretatio	Dermatology	Psychiatry	Counselling		Emergency Medicine/ BLS/ ACLS		Respirator y System	Abdomen	CNS	CVS	Focused History & Examination/ investigation n plan & Managemen
10	10	10	10	10	10	10	10	10	10	10		10		20	20	20	20	70
<b>80 Marks</b>								<b>40 Marks</b>				<b>80 Marks</b>				<b>70 Marks</b>		

<p><b>5 minutes for each station 12 x 5 = 60 Minutes</b>  <b>For 25 students = 125 Minutes= 2hrs 5 minutes</b></p>	<p><b>5 minutes for each station</b>  <b>For 04 students: 20 minutes</b>  <b>For 25 students = 140 Minutes</b>  <b>= 2 hrs 20 minutes</b></p>	<p><b>Two parallel long case</b></p> <ul style="list-style-type: none"> <li>• <b>15 minutes for each student</b></li> <li>• <b>For 13 students: 15 x 13 = 3 hours 25 minutes</b></li> </ul>
<ul style="list-style-type: none"> <li>• Static station must include Rheumatology, Endocrinology, Nephrology, Haematology</li> <li>• Number of rest stations depends upon the number of students</li> </ul>		

**Communication:** **HT**=Focused History Taking, **OC**=other communication.

**Examination:** **CE** = Clinical examination, **SI**= Sign Identification.

**Procedural skills:** **DP**=Diagnostic Procedure, **TP**=Therapeutic Procedure, **IATF**=Identification of Abnormal Test Finding

## INTERNAL ASSESSMENT CALCULATION FOR THEORY PAPER

Internal Assessment	
Periodical class tests / End of module /rotation exam	<b>30 Marks</b>

## INTERNAL ASSESSMENT CALCULATION FOR PRACTICAL

Internal Assessment	
Log book/CBL performance/ End of module /rotation practical Exam/OSCE/ Workshop	<b>30 Marks</b>

### j) Sample MCQs and SEQs

#### Multiple Choice Questions (MCQs)

- A multiple choice question (MCQ) consist of a stem that states the question or problem followed by a set of four possible answers that contain an option that is best answer to the question.
- After reading the questions students should select the appropriate option from the given possible answers.
- The correct answer carries one mark and incorrect carries zero. There is no negative marking.

#### Sample MCQ

1. A 52 years old patient presents with complain of productive cough and fever for 7 days. His chest X-ray shows cavitating lesion with consolidation in left upper lobe. The likely causative organism is
  - a. Hemophilus Influenzae
  - b. Klebsiella Pneumoniae
  - c. Mycoplasma Pneumoniae
  - d. Streptococcus Pneumoniae

**Key: b**

### Short essay question (SEQs)

- Short essay questions require students to present written answers that are used to assess basic knowledge of key facts and provide students with an opportunity to demonstrate reasoning and explain their understanding of the subject.

### Sample SEQ

**Q.** A 20 year old girl presented with complaints of joint pains, oral ulcers and hair loss for 8 months. On examination she had discoid lesions on her face and signs of left sided pleural effusion. Blood Complete picture revealed pancytopenia .

- a) What is the probable diagnosis? (1)
- b) Enlist six further relevant investigations ? (3)
- c) Enumerate three indications for steroid use in this condition. (3)

### KEY

a. SYSTEMIC LUPUS ERYTHEMATOSUS

b. Investigations

1. X-ray Chest PA view
2. Diagnostic pleural tap
3. ANA
4. Anti ds-DNA / Anti Sm antibody-ENA Profile
5. Complement levels (C3, C4 ↓)
6. Complete urine analysis

c. Treatment

Steroids for glomerulonephritis, hemolytic anemia, Pericarditis,  
CNS involvement



**Feedback:**

We only try to help you manage your learning among the thousands of resources in this evolving field. We strongly recommend to link your learning with your clinical setting. Only keep an eye on the learning objectives grid. We sincerely appreciate your feedback as a student reader and a future colleague.

If you have any suggestions for improvement,

Please do not hesitate to contact me.

Prof. Rizwana Kitchlew

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