

STUDY GUIDE

DEPARTMENT OF COMMUNITY MEDICINE



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VISION OF LMDC

To foster a culture of innovation, diversity and learning for our students by putting students first and training them to be the best health care professionals, researchers and visionaries

MISSION OF LMDC

To train future leaders of medicine who set new standards in knowledge, care and compassion

DEPARTMENT OF COMMUNITY MEDICINE

FACULTY & STAFF

<p>Prof. Seema Daud <i>Head, Community Medicine</i> <i>Chairperson, IRB/ERC</i> <i>Chairperson, Research Committee</i> <i>Chief Student Counselor</i> MBBS (Fatima Jinnah Medical College; Punjab University, Lahore, Pakistan) MCPS; FCPS Community Medicine (CPSP, Pakistan) MHPE (Aga Khan University, Pakistan); PhD (Punjab University, Pakistan)</p> 	<p>Dr. Humayun Mirza <i>Associate Professor</i> <i>Focal Person, Dengue Activities</i> MBBS (Punjab Medical College, Punjab University, Lahore, Pakistan) MPH (Northumbria University, Newcastle Upon Tyne, UK) DAC (The Open International University for Complementary Medicine, Sri Lanka)</p> 
<p>Dr. Umbreen Navied <i>Assistant Professor</i> MBBS (King Edward Medical University, Lahore, Pakistan) MPhil (Institute of Public Health, Lahore Pakistan) CMT (University of Health Sciences, Lahore Pakistan)</p> 	<p>Dr. Saadia Maqbool <i>Assistant Professor</i> MBBS (Fatima Jinnah Medical University, Lahore, Pakistan) DMCH (Institute of Public Health, Lahore Pakistan) MPhil (National University of Medical Sciences, Rawalpindi) CHPE (National University of Medical Sciences, Rawalpindi)</p> 
<p>Dr. Ayesha Mansoor <i>Lecturer & PG trainee MCPS Community Medicine</i> MBBS (Lahore Medical & Dental College, UHS, Lahore, Pakistan)</p> 	<p>Dr. Hina Ali <i>Lecturer & FCPS Community Medicine PG trainee</i> MBBS (King Edward Medical University, Lahore, Pakistan)</p> 
<p>Mrs. Rabia Rasheed <i>Medical Social Worker</i> MA Social work (Punjab University, Lahore, Pakistan) MPhil Sociology (Sarghodha University, Sarghodha, Pakistan)</p> 	<p>Muhammad Akbar Ali <i>Computer Operator</i> BA (Punjab University, Lahore, Pakistan)</p> 

TARGET YEARS

First Year MBBS, First Year MBBS, Third Year MBBS, Fourth Year MBBS

DURATION OF SESSION

March, 2024 – December, 2024

INTRODUCTION

Department of Community Medicine at Lahore Medical & Dental College (LMDC), was established in 2001 with a view to impart community based knowledge and skills to the undergraduate students of MBBS and BDS. The department has excelled in not only providing the basic knowledge of Community Medicine but also has pioneered community based research in various fields of Public Health importance. The faculty members and fourth year MBBS students have published numerous articles in indexed journals. The department regularly celebrates National and international health related events and conduct seminars on various health related issues, in which renowned speakers from various fields have been invited to share their expertise with the students and faculty. The Department also has a state of art museum and a library. We have the most qualified faculty in the whole country. Our teaching methodology is problem oriented and student based. Students are evaluated at regular intervals and regular counseling is provided. Our endeavors have been rewarded with excellent results. The Department collaborates with various public and private health institutions and field level organizations where students receive hands on training.

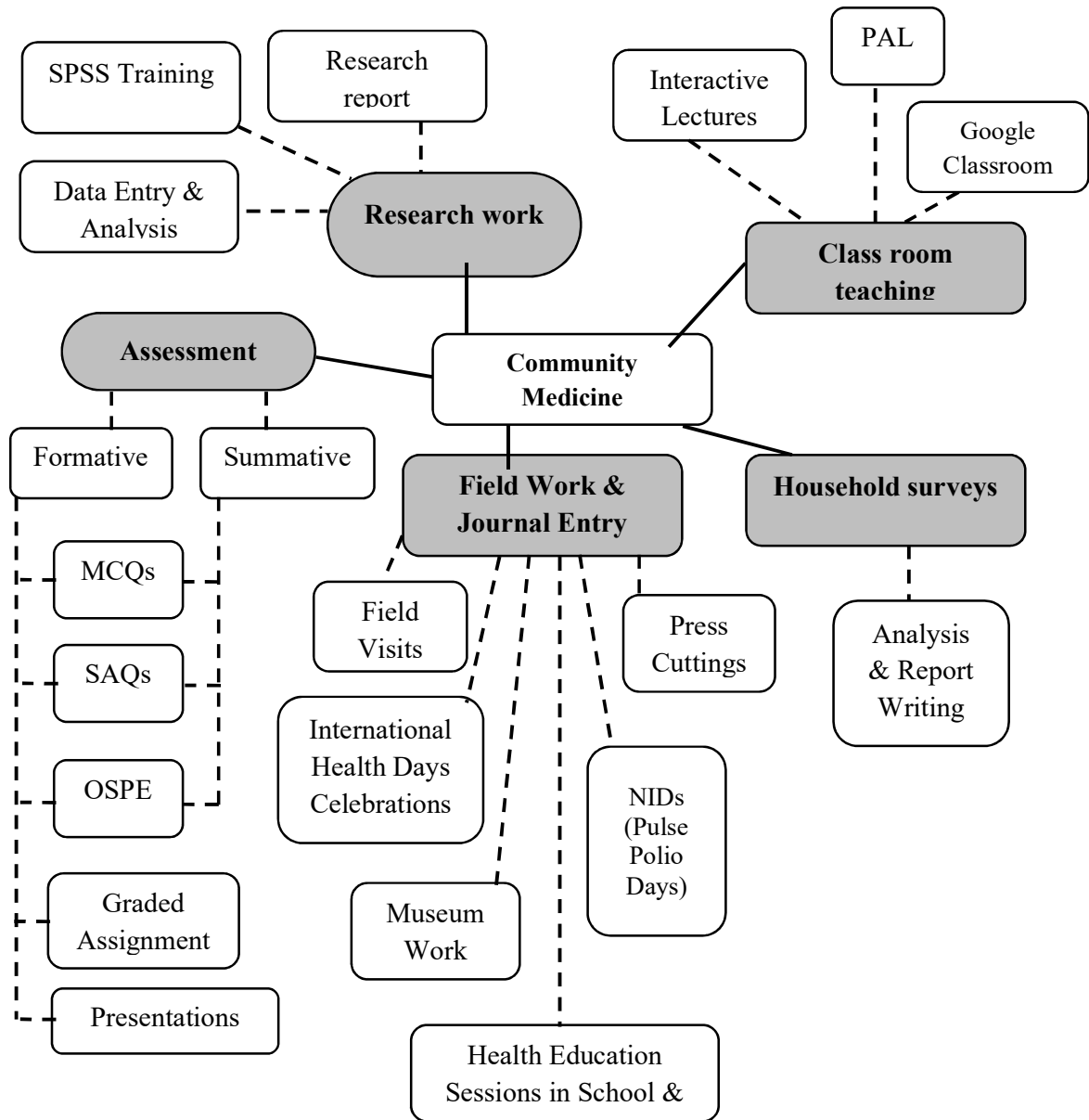
LEARNING OUTCOMES

At the end of the training session medical students should be able to:

1. Appreciate health in a holistic paradigm, in relation to social, economic, environmental and occupational context.
2. Recognize the role of Primary Health Care (PHC) Physician in managing community health.
3. Be familiar with the components and planning of primary health care system.
4. Understand the importance of curative, preventive and promotive aspects of health.
5. Develop skills in communicating with the community.
6. Obtain hands on training in conducting surveys.
7. Conduct research projects and write a research report.
8. Consider a large spectrum of community interventions when dealing with health problems.

CURRICULUM MAP

*Lecture, Seminar, Workshop, Practical, Field Work, Journal Entry, Research work, Assessment, Community Medicine, Field Work & Journal Entry, Household surveys, Analysis & Report Writing, Press Cuttings, NIDs (Pulse Polio Days), Museum Work, Health Education Sessions in School & Community, International Health Days Celebrations, Field Visits, MCQs, SAQs, OSPE, Graded Assignment, Presentations, SPSS Training, Data Entry & Analysis, Research report, Interactive Lectures, PAL, Google Classroom, Class room teaching



CONTENT OF SYLLABUS (PMDC / UHS)

1. Concept of Health and Disease

- Concept of health,
- Definition of health (dimensions, physical, mental, social and spiritual),
- Spectrum of health,
- Determinants of health,
- Responsibility for health,
- Indicators of health
- Concept of disease,
- Concept of causation (all theories including ecological triad, agent host and environmental factors),
- Spectrum of disease,
- Iceberg phenomenon,
- Natural history of disease,
- Levels of prevention,
- Disease elimination and eradication
- Disease surveillance

2. Introduction to Public Health and Health Systems in Pakistan

- Background and concepts: Definitions and concepts in Public Health.
- Development of Public Health in Pakistan,
- Economics and Health,
- Health Policy and planning in Pakistan,
- 'Health for all': Background, Concepts and Progress,
- Primary Health Care: Concepts and Progress,
- National Disease Control programs, policies, strategies and operations
- Health System in Pakistan: The role of Federal and Provincial Governments in Health care.
- The District Health System in the context of devolution.
- The physician as a manager: Function of manager management of material, human and financial resources, Leadership and motivation,
- Partners in Health: The public and private sector. Nongovernmental Organizations and International Agencies,
- Resources for health,
- Community Mobilization.

3. Epidemiology and disease control

- General Epidemiology and Research methodology
- Background and concepts, uses, Basic measurements in Epidemiology (morbidity, mortality, disability and fatality), Epidemiological methods (descriptive, analytic and experimental), Epidemiological transition, Association and causation, Investigation of an outbreak or an epidemic
- Screening for disease, Community diagnosis, Research and survey methodology. Introduction to Quantitative and Qualitative research methodology
- Prevention and control of Infectious diseases:

Definitions to differentiate between

- Infection, contamination, pollution, infestation
- Infectious disease, communicable disease, Contagious disease
- Host, Immune and susceptible persons
- Sporadic, Endemic, Epidemic, Pandemic
- Epizootic Exotic, Zoonosis
- Contact, fomites, Carriers, Insect Vectors, Reservoir of Infection
- Incubation period, infective period, generation time
- Cross infection, Nosocomial infection, Opportunistic infections, Iatrogenic (Physician induced) disorders
- Surveillance, Eradication, Elimination.

Dynamics of infectious disease Transmission

- Reservoir and source of infection,
- Escape of organism,
- Mode of transmission,
- Entry into the body,
- Susceptible host,
- Immunity (different types of immunity and immunization)

Control of infection

- Controlling the reservoir-notification, early diagnosis, treatment, isolation, quarantine, disinfections, Interruption of transmission
- The susceptible host (active & passive immunization
- Chemoprophylaxis, Non-specific measures).
- Health advice to travelers
- National case management guide lines.
- Epidemiology, control and prevention of infectious diseases of Public Health importance
- Diseases transmitted through inhalation
- Diseases transmitted through Faeco-oral route
- Arthropod borne diseases.
- Diseases of animals conveyed to man
- Diseases due to direct contact
- Epidemiology, Control and prevention of non-infectious diseases of Public Health importance
- Hypertension,
- Coronary heart disease,
- Cancers,
- Injuries
- Diabetes Mellitus,
- Obesity,
- Acute Rheumatic fever and heart disease.

4. Biostatistics

- Concepts and uses
- Data and its types
- Rates, ratios and proportions

- Crude, specific and standardized rates
- Collection and registration of vital events in Pakistan
- Sources of health related statistics
- Measures of central tendency, (Mean, Median, Mode)
- Measures of dispersion (Range, Standard deviation, Standard error).
- Normal curve,
- Methods of data presentation (tables, graphs & diagrams).
- Interpretation of data (t-test and Chi-square test)
- Sampling and its various techniques.
- Health Management Information System

5. Demography and Population dynamics

- Concept, demographic principles and demographic processes
- Census, definition, methodology, types.
- Determinants of fertility, mortality
- Population Pyramid and its interpretation
- Demographic Transition, Demographic Trap and its public health importance.
- Demographic and social implication of high population growth.
- Social Mobilization
- Urbanization

6. Food and Nutrition

- Concepts (Nutrition, Nutrient, Food, Diet). Food groups and their functions.
- Role of fiber in diet,
- Balanced Diet.
- Malnutrition at all stages of life, its types causes and prevention, Common nutritional problems of public health importance and their prevention and control.
- Dietary requirements of normal human being at different stages of life.
- Food hygiene, Pasteurization, fortification, additives and adulteration and preservation.
- Food poisoning
- Assessment of nutritional status of a community.

7. Reproductive, Maternal and Child Health

- Safe motherhood, and its components. (Ante-natal, Post-natal, Family Planning & Emergency Obstetric Care)
- Maternal mortality causes and prevention.
- Infant care: Health promotion strategies. Common ailments, home accidents child mortality prevention, Strategic approaches of integrated Management of Childhood Illness
- Adolescent health.
- Reproductive tract infections: guidelines for management of STD's.

8. Health of school age children

- Role of teachers and role of doctor in maintenance of health.
- Procedures for determining health status of school age children
- Common health problems of school children

9. Environmental Health Sciences:

- Air Composition of air. Causes of Air pollution, Purification of Air, Diseases caused by impurities in air and their prevention
- Water: Sources of Water. Daily water requirement, Water pollution its causes and prevention, Purification of Water, Water quality Standards. Diseases due to polluted water
- Waste disposal: Contents, hazards and safety measures for solid and liquid; Domestic, Industrial and Hospital waste
- Climate: Climate and weather. Global environmental concerns (Green house effect, depletion of ozone layer, Acid rains).
- Effect of extremes of temperature humidity, atmospheric pressure on human health and their prevention.
- Radiation: Sources, types, causes, hazards and prevention.
- Healthful housing. Urban and rural slums. Refugee camps and hostels.
- Noise: Definition causes. acceptance level, hazards and control

10. Occupational Health

- Concepts, of occupational health, occupational medicine and occupational hygiene. Ergonomics and its importance
- Occupational hazards. Principles of control
- General principles of occupational disease prevention.
- Organization of occupational health services.
- Health Insurance and Social Security Schemes

11. Arthropods and their public health importance

- Common arthropod borne diseases
- Control of arthropods of medical importance.
- Insecticides and their public health importance

12. Prevention and control of parasitic diseases of public health importance

13. Snake Bites: Personal protection and management

14. Mental Health:

- Concept, Common mental health problems, their causes, prevention and control.
- Juvenile delinquency

15. Behavioral Sciences and lifestyle:

- Concept, attitudes health and illness Behavior
- Drug abuse, addiction and smoking
- Child abuse and child labor
- Role of physical exercise in health disease

16. Information, Education and Communication (IEC)

- Concept, Aims and objectives
- Approaches used in public health
- Contents, principles and stages of health education
- Communication methods, barriers and Skills in health education
- Planning, organizing and evaluating a health education programme
- Social marketing

17. Disaster:

- Definition,
- Classification, (Natural disasters like earthquake floods,
- Epidemic of communicable diseases,
- Man Made Disasters,
- Accidents, thermonuclear warfare, causes and prevention),
- Magnitude and effects of disaster and Public Health consequences,
- Disaster Preparedness
- Disaster Management

18. Medical Ethics:

- Background concepts and components
- National recommended guidelines.

TEACHING & LEARNING METHODOLOGIES (INSTRUCTIONAL STRATEGIES)

- 1) Interactive Lectures
- 2) Small group discussions
- 3) Self-directed Peer Assisted Learning (PAL)
- 4) Essential Skills to be learned in the skills lab
- 5) Student presentations & role plays
- 6) Field Visits
- 7) Household Surveys
- 8) Research Projects
- 9) CPC's
- 10) Google classrooms
- 11) Online Lectures on Microsoft Teams (in case of College closure)
- 12) Virtual Field Visits in case of College closure)

PRACTICAL AND COMMUNITY BASED TRAINING

I) Research Work

Students will be provided practical experience in questionnaire development, data collection, compilation, presentation, analysis and report writing.

II) Field Visits

1. Visit to a Primary Health Care Centre (PHU)
2. Visit to peri-urban locality
3. Visit to a primary school
4. Visit to MCH/Reproductive Health Centre to observe the organization, and function of the centre and to demonstrate counseling skills in one of the following
 - Nutritional counseling for children
 - Pregnant and lactating women
 - Antenatal care
 - Family planning services
 - Immunization of children
5. Visit to a hospital to see the hospital waste disposal & Infection Control
6. Visit to any vocational facility to observe Occupational Health
7. Visit to assess the physical conditions and water supply of an Institution

III) Skills Development Lab

1. Water purification at domestic level
2. Contraceptives
3. Vaccination including the cold chain
4. Oral rehydration solution
5. Data entry & Analysis in SPSS

IV) Household Survey

Students will conduct population based survey, using a structured questionnaire. The survey results will be analyzed and will be presented in the form of a written report containing tables and graphs.

V) Participation in National Immunization Days

Students will participate in administering polio vaccines in the community and hospital, during national immunization days.

VI. Celebration of International health days

Students will celebrate selected health days in the college or in the community to generate awareness about specific health issues.

LEARNING RESOURCES

Recommended Textbooks (Available at the Bookshop):

1. Park K. Park's textbook of preventive and social medicine. 27th ed. Jabalpur, India: Banarasidas Bhanot Publishers, 2022-2023.
2. Ilyas M, Ansari MA. Public Health and Community Medicine. 8th ed. Karachi, Pakistan: Time Publishers, 2016.

Physical resources available:

General library, IT library, Skills lab, Museum artifacts, models and specimen, Handouts

ASSESSMENTS METHODS

Methodology

- Written Class Tests:
- Short Answer Questions (SAQs) &
- Multiple Choice Questions (MCQs)
- Quiz
- Objectively Structured Practical Examination (OSPE)
- Meeting Deadlines of Assignment Submission
- Participation in Research Project (tool development, literature review, write up)
- Class Presentations
- Peer Assisted Learning (PAL) Feedback
- Development of Information, Education and Communication (IEC) material
- Attendance

Formative Assessment (Internal Assessment): **60 marks** (20% of 300)

- | | |
|---|---------|
| • Attendance: | 9 marks |
| • Academics (class test + graded exercise): | 9 marks |
| • Journal work & Submission Deadlines: | |
| • Press Cuttings | 3 marks |
| • Field Visits | 9 marks |
| • National Immunization Day Participation | 3 marks |
| • Celebration of International Health Days | 9 marks |
| • Household Survey | 3 marks |
| • Research Work | 9 marks |
| • Behavior | 6 marks |

Summative Assessment (Fourth Professional University Exam): **300 marks**


- | | |
|--|-----------|
| • Internal Assessment (added to the Theory & Practical marks): | 60 marks |
| • Final University Assessment: | 240 marks |
| Written Exam: | |
| ➤ Short Answer Questions (SAQs) & | |
| ➤ Multiple Choice Questions (MCQs) | |
| Practical Examination: | |
| ➤ Objectively Structured Practical Examination (OSPE) | |

Internal Assessment will be sent to UHS on a quarterly basis.

Quarterly Breakup of Internal Assessment:

Categories	First Quarter March – May	Second Quarter June – August	Third Quarter September – November
Attendance	3 marks	3 marks	3 marks
Academics (class test & graded exercise)	3 marks	3 marks	3 marks
Journal Work & Submission Deadlines			
Press cuttings	3 marks		
Field Visits	3 marks	3 marks	3 marks
National Immunization Day (NID) Participation			3 marks
Celebration of International Health Days	3 marks	3 marks	3 marks
Household survey		3 marks	
Research Work	3 marks	3 marks	3 marks
Behavior	2 marks	2 marks	2 marks
Total	20 marks	20 marks	20 marks

SCHEDULE/ PLANNER/TIMETABLE



Lahore
MEDICAL & DENTAL
COLLEGE

Lahore Medical & Dental College
Canal Bank North, Tulsipura, Lahore
Phone No. 0346-4418891-98
No. LMDC/ /2024, Dated:

3rd YEAR M.B.B.S TIMETABLE SESSION 2021-2022 w.e.f. 12-02-2024

DAYS & TIME	08:00 a.m. to 09:40 a.m.	09:40 a.m. to 09:55 a.m.	09:55 a.m. to 12:10 p.m.	12:10 p.m. to 12:25 p.m.	12:25 p.m. to 12:40 p.m.	12:40 p.m. to 01:30 p.m.	**01:30 p.m. to 03:00 p.m.
MONDAY	Grand Tutorial 1 st week Pharmacology 2 nd week Community Medicine 3 rd week Pathology 4 th week Clinical Pharmacology Lecture Theatre No. 11		Ward / SDL			Pathology Lecture Theatre No. 11	Pathology Pharmacology Forensic Medicine Clinical Pathology Clinical Pharma A+B C+D E+H G+I J+J
TUESDAY	08:00 a.m. to 08:50 a.m. Pathology Lecture Theatre No. 11	08:50 a.m. to 09:40 a.m. Pharmacology Lecture Theatre No. 11	Travel to GTTH	Travel to LMDC	Break	Pharmacology Lecture Theatre No. 11	Pathology Pharmacology Forensic Medicine Clinical Pathology Clinical Pharma A+B C+D E+H G+I J+J
WEDNESDAY	Pharmacology Lecture Theatre No. 11	Pathology Lecture Theatre No. 11	Ward / SDL			Forensic Medicine Lecture Theatre No. 11	Pathology Pharmacology Forensic Medicine Clinical Pathology Clinical Pharma A+B C+D E+H G+I J+J
THURSDAY	Pharmacology Lecture Theatre No. 11	Forensic Medicine Lecture Theatre No. 11	09:40 a.m. to 10:30 a.m. EYE Lecture Theatre No. 11	10:30 a.m. to 11:00 a.m. Break	11:00 a.m. to 11:50 a.m. Pathology Lecture Theatre No. 11	11:50 a.m. to 12:40 p.m. Pharmacology Lecture Theatre No. 11	Behavioral Sciences Lecture Theatre No. 11 Pathology Pharmacology Forensic Medicine Clinical Pathology Clinical Pharma A+B C+D E+H G+I J+J
FRIDAY	Pharmacology Lecture Theatre No. 11	ENT Lecture Theatre No. 11	09:40 a.m. to 10:30 a.m. Pathology Lecture Theatre No. 11	10:30 a.m. to 11:20 a.m. *** Medicine / Surgery Lecture Theatre No. 11	11:20 a.m. to 11:30 a.m. Break	11:30 a.m. to 01:00 p.m. Pathology Pharmacology Forensic Medicine Clinical Pathology Clinical Pharma A+B C+D E+H G+I J+J	

No. LM&DC/1427-50

/2024, Dated: 02-02-24

Copy for Information to the:-

- Principal, LMDC
- Heads of All concerned Departments, LMDC/GTTH
- Director Administration, LMDC
- Director Skills Lab, LMDC
- Director IT, LMDC
- Medical Education Department, LMDC
- Medical Superintendent, GTTH
- Chairman Timetable Committee, LMDC
- Transport Incharge, LMDC
- Lecture Theatre Incharge, LMDC
- Warden/Assistant Warden Hostels (Boys/Girls)
- Security Supervisor, LMDC
- Class Representative (Boy/Girl)
- M/s Ali Tours, LMDC
- Notice Board

- * SDL 1 hour ward time.
- ** SDL 30 minutes practical time.
- *** Medicine / Surgery lecture schedule will be issued separately.
- Schedule of 6 field visits of Forensic Medicine will be issued separately.
- Schedule of Skill lab will be issued separately.

MAJ. GEN. (R) PROF. DR. NAEEM NAQI
PRINCIPAL

Lahore Medical & Dental College
Canal Bank North, Tulsipura, Lahore
Phone No. 0346-4418891-98
No. LMDC/ /2024, Dated:

4th YEAR M.B.B.S TIMETABLE SESSION 2020-2021 w.e.f. 04-03-2024

DAYS & TIME	08:00 a.m. to 09:30 a.m.	09:30 a.m. to 10:30 a.m.	10:30 a.m. to 11:10 a.m.	11:10 a.m. to 11:25 a.m.	** 11:25 a.m. to 01:35 p.m.	01:35 p.m. to 02:10 p.m.	02:10 p.m. to 03:00 p.m.
MONDAY	Practical Pathology Lab	Community Medicine Lecture Theater No. 2	Surgery-I Lecture Theater No. 2	Travel to GTTH	Ward / SDL	Travel to LMDC & Break	Community Medicine Auditorium
TUESDAY	Practical Community Medicine Lecture Theater No. 2	Pathology Lecture Theater No. 2	Medicine Lecture Theater No. 2		Ward / SDL		EYE Auditorium
WEDNESDAY	Practical Pathology Lab	EYE Lecture Theater No. 2	Gynaec / Obs. Lecture Theater No. 2		Ward / SDL / Skill Lab		ENT Auditorium
THURSDAY	08:00 a.m. to 08:50 a.m. Surgery-II Lecture Theater No. 2	08:50 a.m. to 09:40 a.m. Pediatrics Lecture Theater No. 2	09:40 a.m. to 10:30 a.m. Pathology Lecture Theater No. 2	Travel to GTTH	** 10:45 a.m. to 01:35 p.m. Ward / SDL		Pathology Auditorium
FRIDAY	08:00 a.m. to 08:50 a.m. ENT Lecture Theater No. 2	08:50 a.m. to 09:40 a.m. Pathology Lecture Theater No. 2	09:40 a.m. to 10:30 a.m. Medicine Lecture Theater No. 2	10:30 a.m. to 11:20 a.m. Pathology Lecture Theater No. 2	11:20 a.m. to 12:10 p.m. Community Medicine Auditorium	*** 12:10 p.m. to 01:00 p.m. Community Medicine / Research / CPC Auditorium	

No. LM&DC/ 2453-75 /2024, Dated: 27-02-24

* SDL for 30 minutes practical time.

** SDL for 1 hour ward time.

*** In the month of March to July, September & October 2024, 1st two Fridays Community Medicine, next Friday Research & last Friday CPC and in the month of August & November 2024, 1st two Fridays Community Medicine, next two Fridays Research & last Friday CPC.

• Schedule of Skill Lab will be issued separately.

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- Director IT, LMDC
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- M/s Ali Tours, LMDC
- Notice Board

for S.I. Desi
MAJ. GEN. (R) PROF. DR. NAEEM NAQI
PRINCIPAL

COUNSELLING

a. Career Guidance

The Department of Community Medicine is recognized for FSPS part II training. The faculty members provide career counselling to undergraduate and post graduate students for local and foreign admissions and job applications.

b. Psychosocial Counselling

The HOD, Associate Professors and the two Assistant Professors provide psychological counseling to students. Cases which need psychological and psych iatrical assistance are referred to professional consultants under strict confidentiality.