



STUDY GUIDE
3rd Year MBBS
Infectious Disease Clinical Rotation 2025

Medicine and Allied specialties are taught in all five years of MBBS program of Rawalpindi Medical University, Rawalpindi. Third year Medicine and Allied Teaching is divided into Large Group Interactive Sessions (LGIS) and Clinical Clerkship/ Rotation in Wards. This teaching is aligned with all components of main modules of 3rd Year. This document will provide an outline of the Third Year MBBS Infectious Diseases teaching program.

Curriculum Mission and vision

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

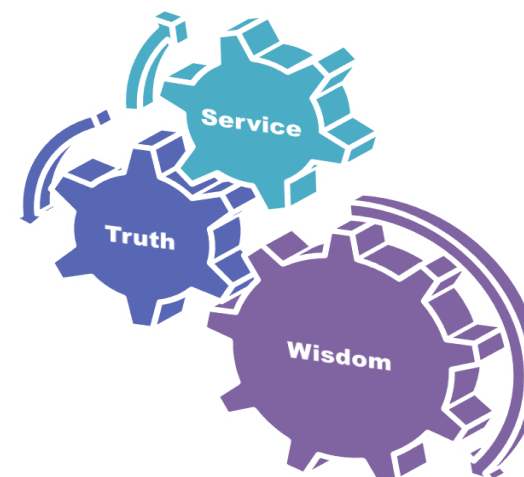
Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine
- Develop and Polish the skills required for providing medical services at all levels of the Health care delivery system.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

RMU Motto



Preamble

This curriculum is according to the standards set by following organizations.

1. Foundation for Advancement of International Medical Education and Research (FAIMER)
2. Accreditation Council for Graduate Medical Education (ACGME)
3. World Federation for Medical Education (WFME)
4. Undergraduate Education Policy 2023 from Higher Education Commission (HEC)
5. Pakistan Medical and Dental Council (PMDC) guidelines for undergraduate Medical Education Curriculum (MBBS) 2022

It is based on **SPICES** model of educational strategies which is student centered, problem based, integrated, community oriented and systematic.*

Teacher centered	→	Student centered	S
Information oriented	→	Problem based	P
Discipline based	→	Integrated	I
Hospital based	→	Community based	C
Standardized curriculum	→	Elective programs	E
Opportunistic	→	Systematic	S

*Harden, R.M., Sowden, S., & Dunn, W.R. (1984). Educational strategies in curriculum development: The SPICES model. Medical Education, 18, 284-297. <http://dx.doi.org/10.1111/j.1365-2923.1984.tb01024.x>



Foundation for Advancement of International Medical Education and Research

Rawalpindi Medical University is in World
Directory of Medical Schools

https://search.wdoms.org/?_gl=1*b2ddww*_ga*MTQyNTAwNzIxMi4xN_zA2ODEwNjcj*_ga_R5BJZG5EYE*MTcwNjgzNjg3Ni4yLjAuMTcwNjgzNjg3Ni4wLjAuMA..

World Directory of Medical Schools

HomeAboutSponsorsSubscriptionSearch

Home > Search > School DetailsNew Search

Rawalpindi Medical University

Pakistan

School DetailsContact InformationProgram DetailsSponsor Notes

School Type:Public

Year Instruction Started:1974

Operational Status:Currently operational

Alternate Names:Rawalpindi Medical College (1974 - 2017)

Academic Affiliation:University of Health Sciences Lahore (Current)
University of the Punjab (Former)

School Website(s):In English

FAIMER SCHOOL ID: F0000151

According to Accreditation Council for Graduate Medical Education (ACGME) the competencies needed are:

- Honesty and Integrity
- Accountability and Transparency
- Equity and Fairness
- Diversity and Inclusion
- Excellence and Innovation
- Stewardship and Service
- Leadership and Collaboration
- Engagement of Stakeholders



The outcomes described by World Federation for Medical Education (WFME) are:

- Values
- Behaviors
- Skills
- Knowledge
- Preparedness for being a doctor



**BASIC MEDICAL EDUCATION
WFME GLOBAL STANDARDS FOR
QUALITY IMPROVEMENT**

The 2020 Revision

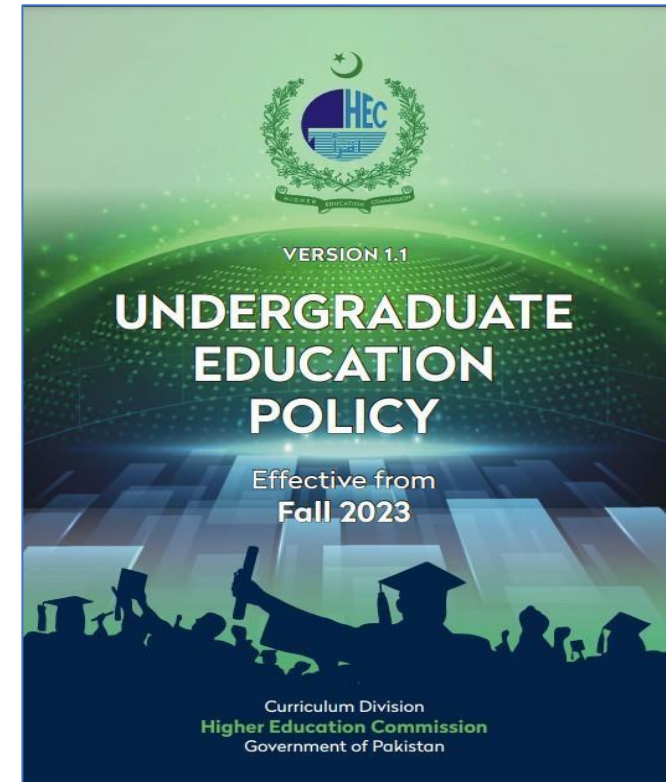
<https://wfme.org/wp-content/uploads/2020/12/WFME-BME-Standards->

According to Undergraduate Education Policy 2023 From Higher Education Commission (HEC)

The primary objective of the policy is to promote the student success which is envisioned as the ability to comprehend and apply conceptual knowledge, acquire professional skills and competencies, and act as an individual having strong civic and ethical values of tolerance and inclusiveness.

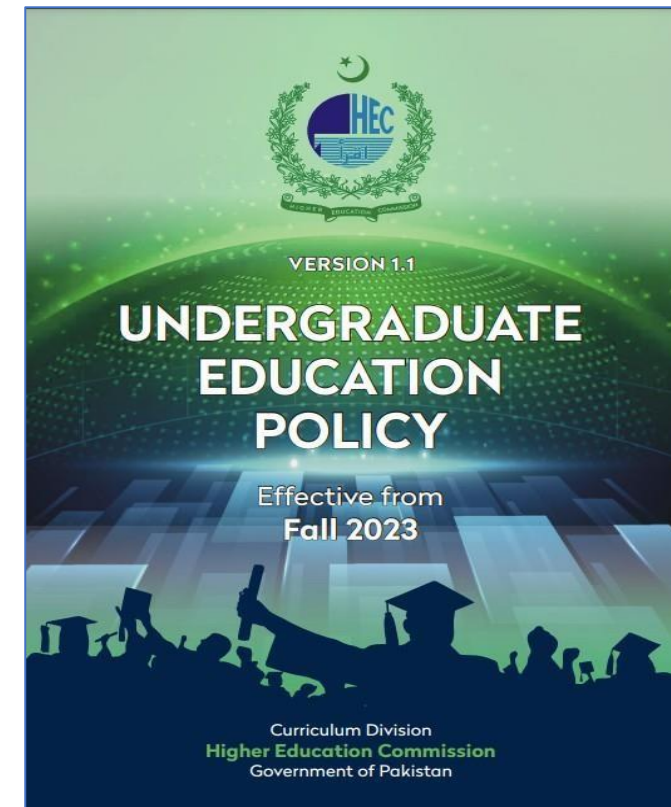
The specific objectives of the policy include the following:

- a) **Competency Based Learning:** To develop the 21 century outcomes of the learning process focusing mainly on: i. Knowledge (disciplinary, interdisciplinary, epistemic, procedural, etc.) ii. Skills (communication and soft skills, proficient use of ICT, integrated, analytical and quantitative reasoning, creative thinking, etc.) iii. Professional Behavior (self-regulation, time management, integrity, intellectual curiosity, intellectual openness, etc.) iv. Interpersonal Attributes (empathy, self-efficacy, teamwork, etc.)
- b) **Balance between Breadth and Depth:** To ensure that the under graduate education focuses not only on the main field of specialization but also provides exposure to the interdisciplinary areas of knowledge.



<https://www.hec.gov.pk/english/services/students/UEP/Documents/UGE->

- c) **Applied Knowledge:** To promote application of academic knowledge to effectively respond to real life, entrepreneurial and industry challenges and requirements.
- d) **Emphasis on Creativity:** To equip students with the sense and ability to demonstrate creativity, curiosity, exploration and reflective problem solving.
- e) **Terminal Degree:** To design all undergraduate degrees with an objective of making them sufficient to meet the requirements of the job market. It will however be at the discretion of the graduates to seek further education.



<https://www.hec.gov.pk/english/services/students/UEP/Documents/UGE->

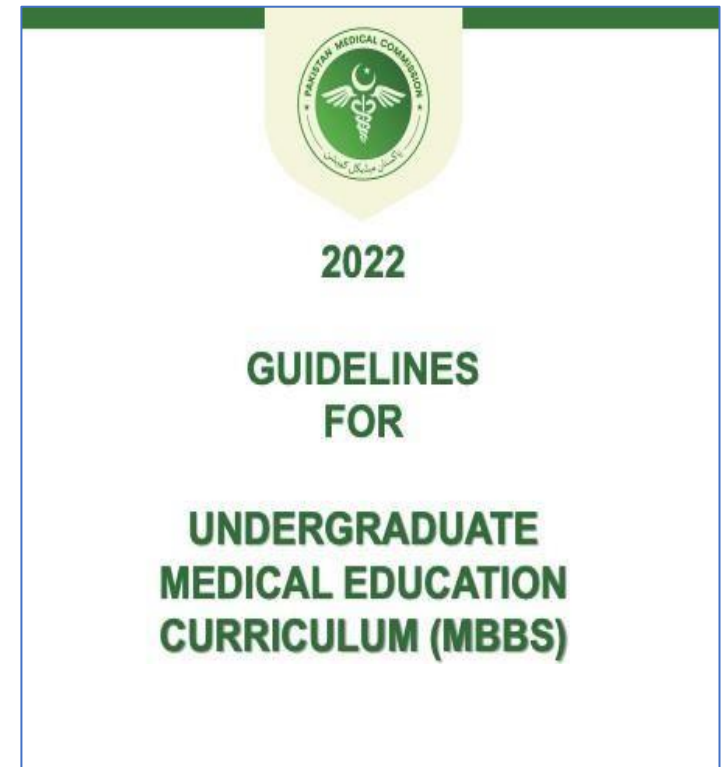
According to Pakistan Medical and Dental Council (PMDC) guidelines for undergraduate Medical Education Curriculum (MBBS) 2022

Seven star doctor

Skillful Knowledgeable Community health promoter Critical thinker
Professional Scholar Leader and role model

Skillful (Clinical, Cognitive and Patient Care Skills)

Takes a focused history Perform physical and psychological examination
Formulates a provisional diagnosis Orders appropriate investigations
Performs various common procedures Debates, formulates management plans
Manages time and prioritizes tasks Ensures patient safety. Advises and counsels, educates, recognizes and takes in to consideration issues of equality
Describes and debates the reasons for the success or failures of various approaches



[https://pmc.gov.pk/Documents/Examinations/Guidelines%20for%20Undergraduate%20Medical%20Education%20Curriculum%20\(MBBS\).pdf](https://pmc.gov.pk/Documents/Examinations/Guidelines%20for%20Undergraduate%20Medical%20Education%20Curriculum%20(MBBS).pdf)

Knowledgeable (Scientific Knowledge for Good Medical Practice)

Differentiates, relates, applies and ensures knowledge is gained.

Community Health Promoter (Knowledge of Population Health and Healthcare Systems)

Understands their role and be able to take appropriate action Determinants of health impact on the community

Takes appropriate action for infectious non- communicable disease and injury prevention Evaluates national and global trends in morbidity and mortality Works as an effective member of health care team Adopts a multidisciplinary approach for health promotion Applies the basics of health systems

Makes decisions for health care.

Critical thinker (Problem Solving and Reflective Practice)

Use of information Critical data evaluation Dealing

effectively with complexity, uncertainty and probability Regular reflection on their practice

Initiating participating in or adopting to change,
flexibility and problem-solving approach

Commitment to quality assurance, Raising concerns about public risks and patient safety.

Professional (Behavior and Professionalism)

Lifelong, self-directed learner Demonstrates continuous learning

Seeks peer feedback Manages information effectively

Provides evidence of continuing career advancement

Functions effectively as a mentor and a trainer, responds positively to appraisals and feedback

Altruistic and empathetic

Ethical, Collaborator, Communicator.

Scholar and Researcher

- a. Identifies a searchable problem and critically reviews the literature
Phrases succinct research questions and formulates hypotheses
- b. Identifies the appropriate research design(s) in epidemiology and analytical tests in biostatistics to answer the research question.
- c. Collects, analyzes and evaluates data, and presents results.
- d. Demonstrates ethics in conducting research and in ownership of intellectual property.

Leader and Role Model

Demonstrates exemplary conduct and leadership potential in a. advancing healthcare b. enhancing medical education c. initiating, participating in and adapting to change, using scientific evidence and approaches d. Enhancing the trust of the public in the medical profession by being an exceptional role model at work and also when away e. accepting leadership roles f. Providing leadership in issues concerning society.

Appreciate concepts & importance of

Research

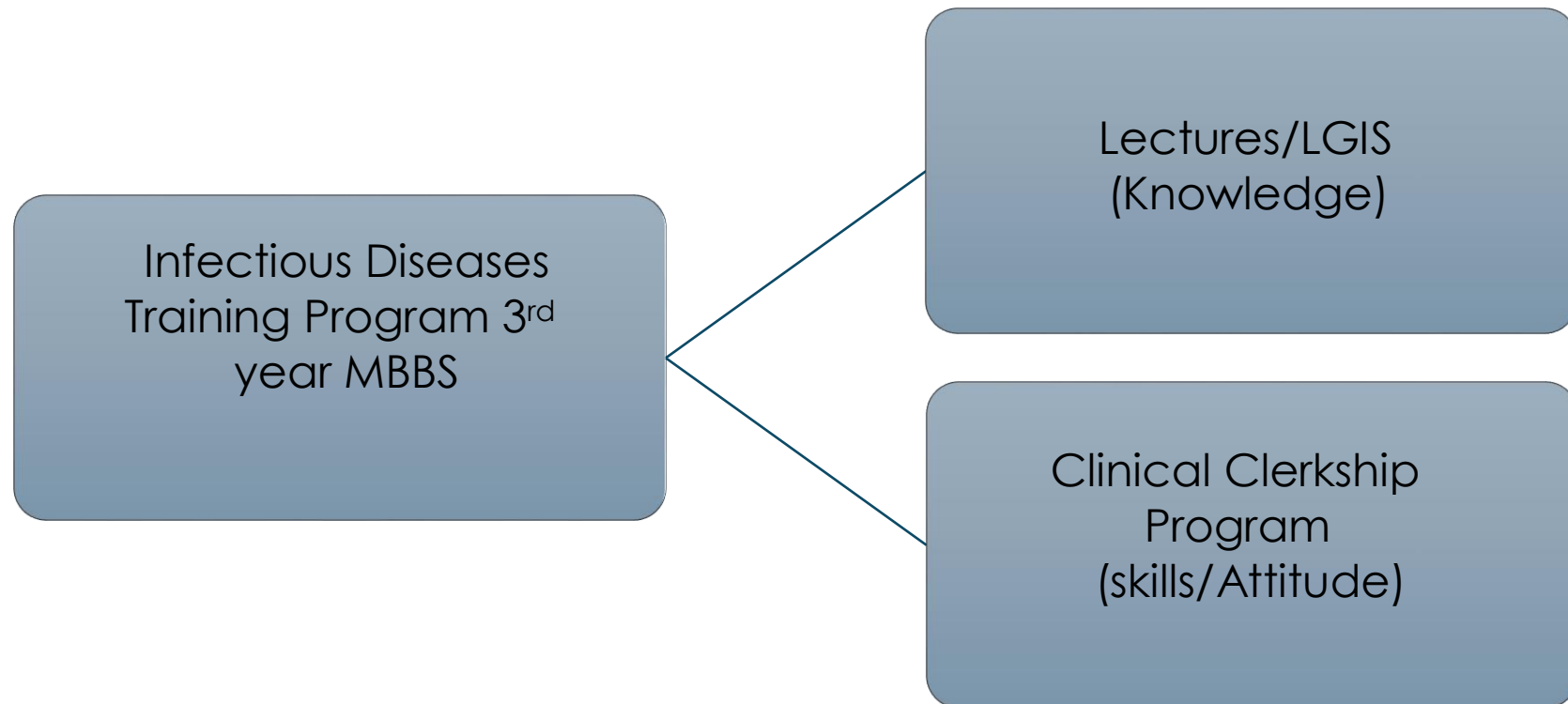
Biomedical ethics

Family medicine

Artificial Intelligence

This module will run in 6 weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning objectives are given in the study guides. Study guides will be uploaded on the university website.

INFECTIOUS DISEASES TEACHING 3rd YEAR MBBS



Infectious Diseases Teaching Hours of 3rd Year MBBS

	Details	Schedule Duration Total 1 week rotation
Clinical Clerkship in wards	Infectious Diseases = 8:00 - 10:30 am, 4 days a week	10 hours
Evening in ward and emergency	3 hours, once a week = 3 hours	3 hours
		13 hours

Infectious Diseases Clinical Training Program (Skill/Attitude) Clinical Module

Academic activity				
Day	08:30 – 09:30	09:30 – 10:30 am	Teacher/ Facilitator	Evening duty 2:0 – 5:0 pm
Monday	Student Gathering and Orientation to Infectious Disease components in 3 rd year, MBBS, including medical ethics	Introduction to different Infectious Disease symptomatology (Fever, Chills, Malaise, Myalgia, cough, dyspnea, chest pain, sputum production, diarrhea, vomiting, abdominal pain, lymphadenopathy)	HOD	Nil
Tuesday	Small Group Interactive session (Common Infectious Diseases presentation e.g., Dengue, Malaria, Tuberculosis)	Art of History Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness. Systemic Inquiry, Past Medical History, Family History, Occupational History, Personal History, Travel History, Blood transfusion history Developmental+ Obstetrics History.	HOD AP/Senior Registrar	Whole batch in Ward
Wednesday	Vital Signs (Pulse, Blood Pressure, Temperature, Respiratory Rate)	Infection Prevention and Control Workshop (including PPE, Hand washing techniques, Mask, Patient Safety Protocols)	HOD AP/Senior Registrar	Nil
Thursday	Small Group Interactive session (Focus on perfecting History Taking components)	Ward OSCE exam	HOD AP/Senior Registrar	Whole Batch in Ward.
Friday & Saturday	No Ward Rotation			
*All students will be regularly evaluated by attendance and participation.				

Bed Allotment for Third Year MBBS

Sr. No	Roll No.	Bed Number
1.	Roll No.	1.
2.	Roll No.	2.
3.	Roll No.	3.
4.	Roll No.	4.
5.	Roll No.	5.
6.	Roll No.	6.
7.	Roll No.	7.
8.	Roll No.	8.
9.	Roll No.	9.
10.	Roll No.	10.
11.	Roll No.	11.
12.	Roll No.	12.
13.	Roll No.	
14.	Roll No.	
15.	Roll No.	
16.	Roll No.	
17.	Roll No.	
18.	Roll No.	
19.	Roll No.	
20.	Roll No.	
21.	Roll No.	
22.	Roll No.	
23.	Roll No.	
24.	Roll No.	

History Taking Checklist

1. Setting the stage for the interview	Remarks
a. Introduction and greeting	
b. Asked patient's name and age, occupation, education, residence, mode and date of admission	
2. Presenting Complaints	
a. Used concise, easily understood questions and complaints (avoid medical terminology) with duration in chronological order	
3. History of present Illness (HPI)	
Used open-ended and closed questions appropriately of each symptom, moving from open to closed.	
a. Onset	
b. Duration	
c. Progression	
d. Aggravating factors	
e. Relieving factors	
f. Associated factors	
g. If pain is the presenting symptoms then ask (SOCRATES) site, onset, character, radiation, timing, exacerbating factors, severity	
DETAIL OF EACH SYMPTOM SHOULD BE TAKEN IN SIMILAR PATTERN	
4. SYSTEMICREVIEW	
• General fatigue, change in weight, appetite, sleep	
• Skin Change in skin color, rash, nail or hair changes	
• Respiratory Cough Shortness of breath? (dyspnea) Wheezing or tightness in your chest? Sputum/phlegm or blood in cough (hemoptysis)? Chest pain with coughing or breathing? (pleurisy)	

<ul style="list-style-type: none"> Cardiovascular <ul style="list-style-type: none"> Chest pain Shortness of breath when lying down or need to sit up to breathe? (orthopnea)/at night (paroxysmal Nocturnal dyspnea) Feet swelling?(edema) Irregular heartbeats or sensation that your heart is racing or skipping beats?(palpitations) 		
<ul style="list-style-type: none"> Gastrointestinal <ul style="list-style-type: none"> Difficulty swallowing? (dysphagia) Heartburn?(reflux) Nausea, vomiting, blood in vomiting (hematemesis) Pain abdomen Excessive belching/ burping? Excessive gas? (flatulence) Difficult or infrequent bowel movements (constipation)? Loose or frequent bowel movements (diarrhea)? Bloody or black tarry stools? (melena) Yellowish discoloration of the skin/whites of the eyes with dark urine (jaundice) Rectal pain, rectal discharge or rectal itching (pruritisani)? 		
<ul style="list-style-type: none"> Neurologic <ul style="list-style-type: none"> Fainting or passing out?(syncope) Seizures? Weakness on one side of your body?(paralysis) Shaking that you can't stop?(tremors) Loss of feeling (anesthesia) or numbness (paresthesia) in part of your body? Dizziness? Loss of balance or lack of coordination? (in coordination) Alterations in consciousness? Headache 		
<ul style="list-style-type: none"> Urinary <ul style="list-style-type: none"> Urinating often?(frequency) Need to urinate suddenly? (urgency) Burning when you urinate? (dysuria) Urinating blood?(hematuria) 		

Getting up more than once a night to urinate? (nocturia) Loss of control of urinating? (urinary incontinence) Pebbles or gravel in your urine? (renal stones) Slow to start urinating? (hesitancy)		
• Endocrine Swelling in neck Feeling unusually hot or cold? (heat/cold intolerance) Loss of sexual drive? (libido) Excessive thirst? Hat/ring/glove size getting bigger? (enlarging glove or hat size)		
• Hematopoietic swelling, lumps or bumps anywhere. (lymphadenopathy, enlarging glands) bleeding or bruising tendencies? Frequent or unusual infections?		
• Musculoskeletal Frequent fractures? Trouble with your joints such as pain, stiffness or swelling? Muscle pain or weakness? Low back pain? Difficulty moving or walking? Aching or cramping pain in calves while walking? (claudication)		
• Head and Neck Headaches? Head injury? (trauma) Neck stiffness?		
• Eyes Bright flashes of light? Changes in vision? Spots in visual field (floaters)? Double vision? (diplopia) pain, redness of eyes		

<ul style="list-style-type: none"> Ears, Nose, Sinuses, Mouth and Throat Sore throat? Painful tooth? Decreased or a change in your sense of taste? Difficult speech/hoar senses of voice Nasal drain age or nosebleeds? (epistaxis) Loss of hearing Ringing in ears 		
5. PASTMEDICAL HISTORY Past major illness for which admitted in hospital or took treatment		
6. PASTSURGICALHISTORY Surgical procedures and hospital admissions		
7. OBSTETRIC ANDGYNAECOLOGICALHISTORY <ul style="list-style-type: none"> a. Menstrual history (onset of menses, cycle length, pads soaked per daily) b. Number of pregnancies and complications c. Menopause(onset) d. Contraception methods 		
8. IMMUNIZATIONHISTORY BCG, Hepatitis B, COVID, EPI vaccines, other vaccines		
9. FAMILYHISTORY <ul style="list-style-type: none"> a. Ages of immediate family members b. Physical and mental health of immediate family members c. Family members with similar symptoms and signs d. Presence of chronic and/ or infectious diseases in family members 		
10. SOCIALHISTORY <ul style="list-style-type: none"> a. Marriage/ other relationships and outcome (e.g. spouse, partner, children) b. Household composition/ living situation (e.g. alone or with others, relationships; care giving) 		
11. PERSONALHISTORY Tobacco, Alcohol, Recreational drugs use Sexually active Partners (ask male/ female/both), history of sexually transmitted disease Occupational hazard/ environmental exposures		

History No. 1

Demographic details:

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Presenting Complaints with duration

Pre morbid complaints/conditions

History of presenting complaints/ Illness

Systemic Inquiry

Past History

Personal History

Family History

Drug History / Treatment History

Menstrual and Obstetric history in case of Female

Socioeconomic History

Travelling History

History of Allergies

Conclusion/diagnosis _____

Tutor Signature _____

History No. 2

Demographic details:

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Presenting Complaints with duration

Pre morbid complaints/conditions

History of presenting complaints/ Illness

Systemic Inquiry

Past History

Personal History

Family History

Drug History / Treatment History

Menstrual and Obstetric history in case of Female

Socioeconomic History

Travelling History

History of Allergies

Conclusion/diagnosis _____

Tutor Signature _____

VITAL SIGN RECORDING

Pulse				
Rate	Rhythm	Volume	Character	Condition of vessel wall
Radio radial symmetry/ delay	Radio femoral Symmetry/ delay	Peripheral pulses		
Blood pressure				
Blood pressure reading and interpretation	Calculation of pulse pressure			
Temperature				
Record and differentiate normal and abnormal temperature interpretation				
Respiration:				
Respiratory rate	Respiratory pattern			
Hydration Status				

Vital Signs Monitoring

1. Greetings	Remarks
2. Informed content	
3. Adequate exposure	
Vital Signs 1. Pulse per minute, rate, rhythm, character, volume, peripheral pulses, radio radial delay, radio femoral delay, condition of vessel wall 2. Blood pressure(mmHg) 3. Temperature 4. Respiratory rate per minute 5. Hydration status	

Vital Sign Recording-1

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Tutor Signature _____

Vital Signs Recording -2

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Conclusion /Diagnosis _____

Tutor Signature _____

Vital Signs Recording -3

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Conclusion /Diagnosis _____

Tutor Signature _____

Vital Signs recording -4

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Conclusion /Diagnosis _____

Tutor Signature _____

Vital Signs Recording -5

Patient's name: _____

Age _____

Sex _____

Occupation _____

Date of Admission _____

Mode of Admission ER/OPD _____

Admission No. _____

Ward _____

Bed No. _____

Contact Details _____

Conclusion /Diagnosis _____

Tutor Signature _____

Department of Infectious Diseases
Clinical Training Program

Hospital _____ Unit _____ Duration from _____ to _____

No.	Date	Topic	Attendance Morning	Sign
1				
2				
3				
4				
5				
6				
7				
8				

Self-Directed Learning

[illegible]

EPA's History and Examination

EPA	Task	Learning Objectives	EPA Level /Supervision level	Level Achieved
History Taking	Students should be able to obtain a comprehensive history	Students should be able to demonstrate art of history taking including all components of history.	3	
Vital Signs examination	Perform and record Vital signs examination	Students should be able to demonstrate accurate methods of Pulse examination, record accurate blood pressure, temperature recording, and respiratory rate measurement	3	
Educate basic disease/ problem information to patients and families.	Practice explaining basic problem information to patients and families	Students should be able to communicate effectively with patients and families, to provide basic disease/ problem information and establish rapport with them.	2	
Able to Describe Infection Prevention and Control	Practice Methods of infection prevention and control.	Students should be able donn and doff personal protective equipment, perform proper hand washing technique.	3	
EPA level 1 = Observation EPA Level 3= Supervision available				EPA Level 2 = Direct supervision EPA Level 4= Performs independently

ASSESSMENT

OSCE:

Total stations: 5

Each station mark: 10

Sr. No	Skill/Competency	Findings	Diagnosis	Marks Obtained	Total Marks	Signature
1	Structured history taking with emphasis on infectious diseases					
2	Structured History of Fever					
3	Structured History of Cough					
4	Structured History of abdominal pain					
5	Structured History of Diarrhea					
6	Infection Prevention and Control Principles					
7	Vital Signs recording					

Continuous Internal Assessment

CIA			Total Marks: 30	
Histories and Logbook 20marks	Attendance 10 marks			
If 5 Histories and Logbook are completed 20 marks less than 5 histories and Logbook is not completed	>90%	10marks		
0 marks	<80%	0 marks		

Total number of Histories = _____ 5 _____

Logbook entries : Yes/ No

Average score = _____

Percentage of Attendance = _____

Average score of attendance = _____

Total CIA marks = Av. of Hx& Logbook + Av. of Attendance = _____ / 30

Ward test marks = OSCE + AV OSCE = _____ /70

Total Marks = Ward test + CIA = _____ Percentage _____

In charge AP/SR _____ Signature: _____

Name Head of Unit: _____ Signature: _____

Table of Specifications

This table outlines the content areas, their relative importance, and the assessment methods used.

Content Area	Importance (Weight age)	Assessment Methods	Specific Topics
History Taking	50%	OSCE stations, Logbook entries	Components of history, Presenting complaint, History of present illness, Systemic inquiry, Past medical history, Family history, Occupational history, Personal history, Travel history, Blood transfusion history, Developmental and Obstetrics history
Physical Examination	30%	OSCE stations, Logbook entries	Vital Sign recording
Infection Prevention and Control	10%	OSCE station, Logbook entries	PPE donning and doffing, Hand washing techniques, Patient safety protocols
Clinical Skills & Procedures	10%	Logbook entries	Hand washing/sanitization and infection prevention

OSPE Exam for Third Year MBBS (Infectious Diseases)

General Instructions:

- The OSPE will consist of 5 stations.
- Each station is designed to assess specific clinical skills and competencies relevant to Infectious Diseases.
- The total duration of the OSPE is 50 minutes (10 minutes per station).
- Students will rotate through each station.
- Read the instructions carefully at each station before proceeding.
- Observe standard infection control practices at all stations.

Station 1: History Taking (Fever)

- **Duration:** 10 minutes
- **Objective:** To assess the student's ability to take a structured history of fever.
- **Scenario:** A patient presents with a 3-day history of fever.
- **Tasks:**
 1. Take a detailed history from the patient (simulated). Include:
 - Onset, duration, and pattern of fever
 - Associated symptoms (e.g., chills, rigors, sweating)
 - Other relevant symptoms (e.g., headache, body aches, cough, diarrhea)
 - Past medical history, medications, allergies

- Travel history
- 2. Summarize the key points of the history.
- **Assessment:**
 - Completeness of history (2 marks)
 - Logical organization of history (2 marks)
 - Relevant questioning and probing (2 marks)
 - Communication skills and rapport (2 marks)
 - Summary of key points (2 marks)

Station 2: Complete History Taking Pattern with emphasis on Infectious Diseases

- **Duration:** 10 minutes
- **Objective:** To assess the student's ability to take a structured history with emphasis on identifying infectious disease risks and red flags.
- **Scenario:** A 30-year-old female presents with 3 days of fever, headache, and myalgia.

1. Presenting Complaint

Fever pattern:

- Onset, duration, maximum temperature
- Continuous vs. intermittent
- Associated chills/rigors

Epidemiologic clues:

- Recent sick contacts
- Animal/insect exposure
- Daycare/workplace outbreaks

2. Systemic Review

Infection-focused symptoms:

- **Respiratory:** Cough, sputum, pleuritic pain
- **GI:** Diarrhea (bloody?), nausea/vomiting
- **Neurologic:** Neck stiffness, photophobia
- **Skin:** Rash (macular/papular/petechial)

3. Past Medical History

Immunocompromise risks:

- HIV, diabetes, immunosuppressants
- Asplenia, cancer chemotherapy

Vaccination status:

- Influenza, COVID-19, meningococcal
- Travel vaccines (yellow fever, typhoid)

4. Exposure History

Travel:

- Locations (malaria/dengue/Zika zones)
- Rural vs. urban stay
- Unsafe food/water

Occupational:

- Healthcare worker (TB/meningitis risk)
- Veterinarian (zoonoses)

High-risk behaviors:

- Unprotected sex (HIV/HBV/HCV)
- IV drug use (endocarditis)

5. Medication History

Recent antibiotics (C. difficile risk)

Prophylaxis adherence (malaria/HIV PEP)

Assessment:

- **Epidemiologic risk identification** (4 marks)
- **Infection-focused review** (3 marks)
- **Vaccination/exposure history** (2 marks)
- **Clinical correlation** (1 mark)

Station 3: Vital Signs Recording

- **Duration:** 10 minutes
- **Objective:** To assess the student's ability to accurately measure and document vital signs, recognizing abnormal values requiring urgent intervention.
- **Scenario:** A 55-year-old male patient with fever for 1 week requires routine vital sign monitoring

Tasks:

1. Measure and Document:

- **Blood Pressure:** Correct cuff size, Patient position (seated/supine, arm at heart level)
- **Pulse:**
 - Rate, rhythm, volume, character, radio radial and radio femoral symmetry or delay
 - Capillary refill time (<2 sec)
- **Respirations:**
 - Count for 30 sec (unnoticed by patient)
 - Pattern (regular, Cheyne-Stokes)
- **Temperature:**
 - Oral/axillary method (document route)

2. Identify Abnormalities:

- Hypertension (BP >140/90 mmHg)
- Tachycardia (HR >100 bpm)
- Fever (>38°C)

3. Clinical Correlation:

- Link findings to potential causes (e.g., tachycardia → pain vs. hemorrhage)
- State actions for critical values (e.g., notify physician if SBP <90 mmHg)

Assessment:

- **Measurement accuracy** (4 marks)
- **Documentation completeness** (3 marks)
- **Abnormality recognition** (2 marks)
- **Clinical response** (1 mark)

Station 4: Infection Prevention (Hand Hygiene)

- **Duration:** 10 minutes
- **Objective:** To assess the student's ability to perform proper hand hygiene techniques according to WHO guidelines.
- **Scenario:** You are preparing to perform a sterile procedure on a patient.

Tasks:

1. Demonstrate proper hand hygiene:

- **Handwashing with soap and water:**
 - Wet hands with clean, running water
 - Apply soap and lather for 20 seconds
 - Cover all surfaces:
 - Palms → backs → between fingers → thumbs → fingertips → wrists
 - Rinse thoroughly and dry with single-use towel
- **Alcohol-based hand rub:**
 - Apply palmful of product
 - Rub hands covering all surfaces until dry (~20-30 seconds)

2. Explain when each method is indicated:

- **Soap and water:**
 - Visibly dirty hands
 - After using restroom
 - Before eating
 - After exposure to C. difficile or norovirus
- **Alcohol-based rub:**
 - Before/after touching patient
 - Before aseptic procedures
 - After contact with body fluids

3. Identify common missed areas (thumbs, fingertips, wrists).

Assessment:

- Technique (soap/water or alcohol rub) (5 marks)
- Timing (minimum 20 seconds) (2 marks)
- Knowledge of indications (2 marks)
- Identification of high-risk areas (1 mark)

Station 5: Pediatric Fever Counseling

- **Duration:** 10 minutes
- **Objective:** To assess ability to educate parents about childhood fever management
- **Scenario:** Parents of a 3-year-old with 103°F fever seek advice

Tasks:**1. Explain fever physiology:**

- "Fever helps fight infection - we treat for comfort, not numbers"

2. Demonstrate medication dosing:

- Show proper acetaminophen dosing using syringe
- "Never use aspirin in children"

3. Teach warning signs:

- "Bring to ER if neck stiffness, purple rash, or trouble breathing"

Assessment:

- Medication teaching accuracy (3 marks)
- Danger sign recognition (3 marks)
- Parental reassurance skills (2 marks)
- Teach-back of dosing (2 marks)

Recommended Resources

(Bold ones are essential)

1. **Kumar and Clark's Clinical Medicine, 10th Edition, 2020**
2. **Davidson's Principles and Practice of MEDICINE, 24th edition 2023**
3. **Videos on clinical skills available on NEJM website, free online.**
4. **MacLeod's Clinical Examination. Churchill Livingstone. 14th Edition 2018**
5. **Clinical Examination by Nicholas Talley & Simon O'Connor. Elsevier. 9th Edition 2020**
6. MacLeod's Clinical Diagnosis by Alan G Japp & Colin Robertson Elsevier, 2nd Edition 2017
7. Medical Statistics Made Easy, Harris & Taylor. Churchill Livingstone, 2nd Edition, 2008
8. RMU/HEC Digital Library
9. Uptodate available at RMU Library
10. ABC of Practical Procedures by Tim Nutbeam and Ron Daniels: Blackwell Publishing, BMJ Books, UK, 2010
11. RAPID ACLS by Barbara Aehlert: Elsevier Revised 2nd Edition 2012
12. Kaplan USMLE Step-2 CK Lecture Notes
13. Current Medical Diagnosis & Treatment, 61st Edition, 2024
14. Cecil's Essentials of MEDICINE: By Andreoli and Carpenter, 10th edition 2021.
15. Clinical Medicine, A Clerking Companion: By Randall & Feather, OUP 2011.
15. Oxford American Handbook of Clinical Medicine, OUP, 10th edition 2017.
16. Davidson's 100 clinical cases. Churchill Livingstone. 2nd Edition, 2012.
17. Oxford Handbook of Clinical diagnosis. Oxford University Press. 10th Edition 2017.
18. Problem Based Medical Diagnosis (POMD) By John Friedman 7th Edition 2000.
19. The Patient History: An Evidence-Based Approach to Differential Diagnosis
20. Henderson, Tierney and Smetana. McGraw Hill Medical. 2nd Edition 2012.
21. Mechanisms of Clinical Signs by Dennis, Bowen and Cho. Churchill Livingstone. 2020, 3rd edition
22. The Rational Clinical Examination. JAMA Evidence. 2009
23. Tutorials in Differential Diagnosis (Beck tutorials) by Beck and Souhami. 4th Edition 2004
24. How to read a paper, Trisha Greenhalgh. BMJ books, 6th Edition, 2019
25. USMLE and MRCP resources