COURSE CURRICULUM FOR THIRD PROFESSIONAL B.U.M.S.

(PRESCRIBED BY NCISM)

# ISABAT

# (Emergency Medicine)

(SUBJECT CODE : UNIUG-EM)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)

ncism

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BOARD OF UNANI, SIDDHA AND SOWA-RIGPA

NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

NEW DELHI-110026

NCISM

# III Professional Kamil-e-Tib-o-Jarahat

## (Bachelor of Unani Medicine and Surgery(B.U.M.S.))

# Subject Code : UNIUG-EM

Isabat

(Emergency Medicine)

**Summary**

| **Total number of Teaching hours:** 60 | | | |
|---|---|---|---|
| Lecture (LH) - Theory | | | |
| Paper I | 0 | 0 | 0(LH) |
| Non-Lecture (NLHT) | | | |
| Paper I | 0 | 0 | 60(NLH) |
| Non-Lecture (NLHP) | | | |
| Paper I | 60 | 60 | |

| **Examination (Papers & Mark Distribution)** | | | | | |
|---|---|---|---|---|---|
| **Item** | **Theory Component Marks** | **Practical Component Marks** | | | |
| | | **Practical** | **Viva** | **Elective** | **IA** |
| Paper I | - | - | - | - | - |
| Sub-Total | - | - | | | |
| Total marks | - | | | | |

**Important Note:-** The User Manual III BUMS is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to syllabus24uni@ncismindia.org

# Preface

Moalajat is the foundational subject within Unani medicine, from which all other clinical disciplines emerge as its offshoots, each deeply rooted in its core concepts and practices. This discipline plays a pivotal role in shaping future Unani physicians by blending the rich heritage of traditional healing with contemporary medical insights. For undergraduate students, mastering Moalajat is essential for their growth as competent and compassionate healthcare providers.

This competency based curriculum and syllabus has been thoughtfully crafted to provide students with a comprehensive foundation in Moalajat, emphasizing the principles of Unani medicine along with contemporary diagnostic and therapeutic approaches. It highlights essential areas such as disease diagnosis, treatment planning, preventive care, and patient management, while also incorporating key skills in clinical reasoning, data interpretation, and ethical medical practice. The curriculum equips students with the knowledge, skills and attitude necessary for effective clinical practice and lifelong learning.

Addressing a diverse array of topics designed for undergraduate study, the curriculum supports students in bridging theoretical knowledge with practical application. The curriculum includes designated lecture hours for foundational learning as well as non-lecture hours that incorporate engaging teaching methods, such as case-based learning, flipped classrooms, role play, simulation exercises, etc. These innovative approaches not only enhance student interest but also foster deeper understanding and retention of material. Educators are encouraged to guide students in honing their clinical skills, fostering critical thinking, and developing a holistic, patient-centred approach to healthcare. Aportion of the syllabus is specifically dedicated for training the students in basic life support and management of medical emergencies.

We believe this syllabus will serve as an invaluable resource for students as they embark on their journey toward becoming competent medical professionals. By engaging with the topics and outlined learning objectives, students will be well-prepared to contribute to patient care, continue their medical education, and build a solid foundation for their future medical careers.

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Course Code and Name of Course

| Course code | Name of Course |
|---|---|
| UNIUG-EM | Isabat |

Table 1 : Course learning outcomes and mapped PO

| SR1<br>CO No | A1<br>Course learning Outcomes (CO) UNIUG-EM At the end of the course UNIUG-EM, the students should be able to | B1<br>Course learning Outcomes mapped with program learning outcomes. |
|---|---|---|
| CO1 | Explain the etiology, pathophysiology, signs and symptoms, complications, principles of management and management of diseases in light of Unani system of medicine and recent contemporary knowledge. | PO2,PO8 |
| CO2 | Apply and adapt proficient communication and clinical skills while interacting with, examining and treating the patients. | PO4,PO5,PO8 |
| CO3 | Correlate the clinical signs and symptoms to make a provisional diagnosis, formulate differential diagnosis, suggest relevant investigations and interpret the findings. | PO2,PO3,PO4,PO8 |
| CO4 | Demonstrate ability to provide initial care for medical emergencies. Identify patients requiring referral to higher centres for advanced care. | PO2,PO3,PO6,PO8 |
| CO5 | Educate patients, attendants and community about preventive healthcare measures and healthy lifestyle choices based on approaches of Unani medicine to wellness and disease prevention. | PO1,PO2,PO5 |
| CO6 | Exhibit professional, moral and behavioural ethics in patient care and empathy towards patients. | PO7 |

Table 2 : Contents of Course

| Paper 1 () | | | | | | |
|---|---|---|---|---|---|---|
| Sr.No | A2<br>List of Topics | B2<br>Term | C2<br>Marks | D2<br>Lecture hours | E2<br>NonLecture hours Theory | F2<br>NonLecture hours Practica l |
| 1 | 1 Introduction to Emergency Medicine & Assessment and Triage in Emergency Situations<br>ایمرجنسی میڈیسن کا تعارف و اصلاباتی صورتحال میں معالجاتی تجزیہ و طبی ترجیحات<br><br>This topic focuses on introduction of emergency medicine to students along with developing skills to triage and perform rapid assessments in simulated emergency scenarios. Students will learn to prioritize cases based on urgency, identify life-threatening conditions, and apply a structured approach to stabilize patients through quick decision-making and basic interventions. | 1 | 0 | 0 | 0 | 5 |
| 2 | 2 زندگی کے تحفظ و تنفسی تدابیر کے بنیادی اصول (Basic Life Support (BLS) and Airway Management)<br><br>This topic covers the practical application of BLS techniques, including chest compressions and ventilation, under guided supervision. Students will also learn modifications for special populations such as pregnant women, elderly individuals, and obese patients. Through demonstrations and hands-on practice, students will gain proficiency in performing BLS effectively. | 1 | | 0 | 0 | 4 |
| 3 | 3 نزف الدم کی اصلاباتی تدابیر (Emergency Management of Bleeding and Haemorrhage) | 1 | | 0 | 0 | 5 |

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| | This topic teaches students how to assess and manage bleeding in emergency settings. Students will practice techniques for controlling external bleeding (direct pressure, elevation, tourniquets) and performing suturing. They will also learn to initiate resuscitation measures for significant hemorrhage, including fluid replacement and hemodynamic monitoring. | | | | | |
| 4 | 4 غیر متوازن دماغی حالت کے مریضوں کا ابتدائی استحکام (Initial Stabilization of Patients with Altered Mental Status)<br><br>This topic focuses on the assessment and management of altered mental status and respiratory distress. Students will learn to identify common causes, stabilize the patient using ABCs (airway, breathing, circulation), and apply clinical reasoning to determine when advanced care or referral is necessary. Simulated scenarios will enhance decision-making and intervention skills. | 1 | | 0 | 0 | 4 |
| 5 | 5 اصلاباتی ادویہ کا انتظام (Emergency Medication Administration)<br><br>This topic covers the identification, selection, and safe administration of emergency medications. Students will practice administering commonly used medications, understand their indications, contraindications, and side effects, and respond to adverse reactions in a clinical setting. Simulated scenarios will reinforce safe medication management. | 2 | | 0 | 0 | 6 |
| 6 | 6 وجع الحاد کا تجزیہ و تدابیر (Assessment and Management of Acute Pain)<br><br>This topic combines the administration of emergency medications with acute pain management. Students | 2 | | 0 | 0 | 4 |

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| | will learn to assess pain severity and apply both pharmacologic and supportive pain relief measures tailored to the patient's condition. They will also manage potential adverse reactions during practical scenarios. | | | | | |
| 7 | 7 صاباتی نگہداشت میں یونانی معالجہ کا استعمال (Use of Unani Therapeutics in Emergency Care)<br><br>This topic focuses on applying Unani therapies for managing acute medical emergencies, including pain relief, gastrointestinal distress, wound care, and respiratory and shock management. Students will also practice seizure first aid and traditional regimental techniques such as cupping therapy and venesection in controlled environments. | 2 | | 0 | 0 | 14 |
| 8 | 8 اضطرابِ تنفسی کی تدابیر (Management of Respiratory Distress)<br><br>This topic teaches students to perform a focused respiratory assessment to identify respiratory distress. Students will practice initial interventions, such as positioning and oxygen therapy, and learn to identify when referral is necessary for severe respiratory failure. Simulated exercises will enhance assessment and intervention skills. | 3 | | 0 | 0 | 6 |
| 9 | 9 صدمہ کی تدابیر اور مائیت کی بحالی (Management of Shock and Fluid Resuscitation)<br><br>This topic covers assessment, intervention, and fluid resuscitation in patients with respiratory distress and shock. Students will perform rapid assessments (vital signs, capillary refill, and peripheral perfusion) and initiate IV access and fluid resuscitation. Real-time simulations will allow continuous monitoring and adjustment of interventions. | 3 | | 0 | 0 | 6 |

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| 10 | 10 اصلاباتی نگہداشت میں مواصلات، دستاویزات کی تیاری وحوالگی/منتقلی (Communication, Documentation, Referral/Handover in Emergency Care)<br><br>This topic focuses on effective communication with patients, families, and the healthcare team. Students will practice empathetic engagement to foster trust, accurate documentation of assessments and interventions, and handoff communication for continuity of care. Role-playing and simulations will enhance communication and documentation skills in emergency settings. | 3 | | 0 | 0 | 3 |
| 11 | 11 Miscellaneous Topics<br><br>This topic covers the management of common acute emergencies, including poisoning, burns, scalds, and foreign body removal. Students will learn to assess, treat, and stabilize patients using appropriate protocols and techniques. Through simulations and hands-on practice, they will develop essential skills to effectively manage these critical conditions in emergency settings. | 3 | | 0 | 0 | 3 |
| | **Total** | | **0** | **0** | **0** | **60** |
| **Grand Total** | | | **0** | **0** | **0** | **60** |

Table 3 : Learning objectives of Course

| Paper 1 () | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| A3 Course outcome | B3 Learning Objective (At the end of the session, the students should be able to) | C3 Domain/sub | D3 MK / DK / NK | E3 Level | F3 T-L method | G3 Assessment | H3 Assessment Type | I3 Term | J3 Integration | K3 Type |
| Topic 1 Introduction to Emergency Medicine & Assessment and Triage in Emergency Situations ایمرجنسی میڈیسن کا تعارف و اصاباتی صورتحال میں معالجاتی تجزیہ و طبی ترجیحات (LH : 0, NLHT: 0, NLHP: 5 hours) | | | | | | | | | | |
| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
| CO4 | Classify patients into triage categories with accuracy and consistency based on the severity of their condition using standard triage protocols (e.g., START or ESI) during a simulated emergency scenario. | PSY-MEC | MK | SH | CBL, D, RP, PBL, SIM | DOPS, QZ , DOPS, CHK, OSCE | F&S | 1 | - | NLHP1.1 |
| CO4 | Demonstrate the ability to apply practical skills in rapid assessment and decision-making to identify life-threatening conditions and initiate basic interventions. | PSY-GUD | MK | SH | SIM, D | OSCE, DOPS, SP, DOPS | F&S | 1 | - | NLHP1.2 |
| CO4 | • Demonstrate the ability to identify and appropriately position key components of an Emergency Department (ED) setup, such as triage stations, resuscitation bays, and monitoring equipment.<br>• Perform the correct setup and safe handling of basic emergency equipment, including | PSY-SET | MK | SH | SIM, D | OSCE, SP, CHK, P-VIVA | F&S | 1 | - | NLHP1.3 |

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| | defibrillators, oxygen therapy devices, and vital sign monitors, in a simulated clinical environment.<br>• Demonstrate the proper technique for connecting and operating emergency equipment to assess and manage simulated patients effectively. | | | | | | | | | |

| Non Lecture Hour Theory | | |
|---|---|---|
| **S.No** | **Name** | **Description of Theory Activity** |

| Non Lecture Hour Practical | | |
|---|---|---|
| **S.No** | **Name** | **Description of Practical Activity** |
| NLHP1.1 | Assessment and Triage in Emergency Situations | **Activity Plan (2 hours)**<br><br>**1. Introduction and Demonstration (30 mins)**<br><br>• Briefly explain triage principles, the importance of triage in emergency situations, and an overview of the START and ESI protocols<br>• Demonstrate the use of triage tags (e.g., red, yellow, green, and black) and their meaning with an example scenario<br><br>**2. Group Practice: Simulated Triage Exercise (60 minutes)**<br><br>• Create a simulated disaster or mass casualty event using mannequins or role-playing participants portraying injured patients. |

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| | | • Assign mock injuries, symptoms, and vital signs to each "patient" based on predesigned scenarios.<br>• Divide students into groups of 4-5. Each group will rotate through different stations.<br>• At each station, students will:<br>  ○ Assess the simulated patient using the START or ESI protocol.<br>  ○ Make triage decisions (e.g., immediate, delayed, minor, or expectant care).<br>  ○ Apply the appropriate triage tag to the patient.<br>• Provide each group 10 minutes per station.<br><br>**3. Debriefing and Feedback (30 minutes)**<br><br>• Gather all students after the exercise and discuss the decisions made at each station.<br>• Highlight correct classifications and common errors.<br>• Provide constructive feedback on assessment speed, accuracy, and protocol adherence.<br>• Ask students to reflect on their challenges during the activity and discuss strategies for improvement.<br><br>**Materials Required**<br><br>• Triage tags (red, yellow, green, black).<br>• Mannequins or volunteers for role-play.<br>• Simulated injury cards with descriptions of patient conditions, vital signs, and other observations. |

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| | | • A stopwatch or timer for each station.<br>• Whiteboard or projector for protocol explanation. |
| NLHP1.2 | Assessment and decision-making in life-threatening conditions. | **Activity Plan (1 hour)**<br><br>• Instructors demonstrate the assessment techniques used in identifying life-threatening conditions, such as: Checking airway, breathing, and circulation (ABCs), Performing a rapid physical examination, Assessing vital signs.<br>• Organize a simulation scenario where students must apply their knowledge and skills. Provide students with a set of emergency scenarios featuring patients with life-threatening conditions. Allow students to practice rapid assessment and decision-making, focusing on identifying critical issues.<br>• In small groups, have students practice assessing simulated patients under the supervision of instructors. Instructors provide guidance, feedback, and support as students perform assessments and make decisions.<br>• Teach students about basic interventions based on their assessments, such as: Administering oxygen, Positioning patients appropriately, Calling for additional help or advanced care.<br>• After the simulation, hold a debriefing session where students discuss their experiences, challenges faced, and decision-making processes. |

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| | | • Instructors provide constructive feedback on performance and areas for improvement. |
| NLHP1.3 | Components of an Emergency Department (ED) | **Activity Plan (2 Hours)**<br><br>**1. Introduction (10 Mins):**<br><br>• Brief the students about the structure and workflow of an Emergency Department (ED).<br>• Explain the purpose of triage stations, resuscitation bays, and monitoring equipment, emphasizing their positioning and role in patient care.<br>• Highlight the importance of proper handling and setup of emergency equipment.<br><br>**2. Station-Based Simulation Activity (80 Mins):**<br><br>• Divide students into **three groups**, rotating through three stations (approximately 25 minutes per station, including transitions and instructions).<br><br>**Station 1: ED Setup and Positioning**<br><br>• Students will arrange a mock ED with correctly positioned triage stations, resuscitation bays, and monitoring areas.<br>• Instructor provides feedback and makes adjustments to ensure optimal workflow. |

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| | | **Station 2: Equipment Setup and Handling**<br><br>• Students practice setting up and safely handling emergency equipment, including:<br>  ○ Preparing a defibrillator (turning on, selecting mode, and attaching pads to a mannequin).<br>  ○ Setting up oxygen therapy devices (selecting appropriate equipment, attaching it to mannequins, and adjusting oxygen flow).<br>  ○ Operating a vital sign monitor (connecting leads, measuring vitals, and interpreting basic readings).<br><br>**Station 3: Equipment Operation and Patient Management**<br><br>• Students demonstrate how to connect and operate emergency equipment (e.g., attach leads, provide oxygen, and deliver defibrillation) on a simulated patient.<br>• Each scenario involves a "patient" with a specific issue (e.g., arrhythmia, hypoxia).<br>• The focus is on safe operation, effective assessment, and proper clinical management using the equipment.<br><br>**3. Debriefing and Feedback (30 Mins):**<br><br>• Each group shares their experiences and discusses challenges they faced in the stations.<br>• Instructor reviews key learning points for each station and corrects any mistakes. |

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| | | • Discuss the importance of teamwork and communication in the ED environment.<br>• Provide feedback on individual and group performance using a checklist for skills assessment.<br><br>**Materials Required:**<br><br>1. Mock ED setup or simulation room<br>2. Defibrillators (mannequin-compatible, if possible)<br>3. Oxygen therapy devices (nasal cannula, oxygen masks, flow meter)<br>4. Vital sign monitors<br>5. Patient mannequins or actors (if available)<br>6. Triage tags and cards for patient scenarios<br>7. Checklist for proper equipment setup and operation<br>8. Station labels for triage, resuscitation, and monitoring areas |

**Topic 2 زندگی کے تحفظ و تنفسی تدابیر کے بنیادی اصول (Basic Life Support (BLS) and Airway Management)** (LH : 0, NLHT: 0, NLHP: 4 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
|---|---|---|---|---|---|---|---|---|---|---|
| CO4 | Demonstrate the ability to perform Basic Life Support (BLS) techniques, including airway management, chest compressions, rescue breaths, and the use of an automated external defibrillator (AED), adhering to standard protocols, in a simulated clinical setting. | PSY-COR | MK | SH | SIM, D, RP | DOPS, SP, DOPS, OSCE | F&S | 1 | - | NLHP2.1 |

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| CO4 | Discuss and demonstrate BLS in special populations: Pregnant women, elderly, obese patients in a simulated emergency scenario | PSY-GUD | MK | SH | D, SIM, RP | OSCE, DOPS, SP, DOPS | F&S | 1 | - | NLHP2.2 |

| **Non Lecture Hour Theory** | | |
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| **S.No** | **Name** | **Description of Theory Activity** |

| **Non Lecture Hour Practical** | | |
|---|---|---|
| **S.No** | **Name** | **Description of Practical Activity** |
| NLHP2.1 | Basic Life Support (BLS) techniques | **Activity Structure (Duration: 2 hours)**<br><br>**Phase 1: Demonstration (15 mins)**:<br><br>• Briefly explain the importance of BLS in emergency care.<br>• Highlight key components: airway management, chest compressions, rescue breaths, and AED usage.<br>• The instructor demonstrates step-by-step BLS techniques on a mannequin, including:<br>  ○ Checking responsiveness and calling for help.<br>  ○ Opening the airway (head-tilt, chin-lift method).<br>  ○ Performing high-quality chest compressions.<br>  ○ Delivering rescue breaths using a bag-valve mask (BVM).<br>  ○ Operating an AED, including electrode placement and following prompts. |

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| | | **Phase 2: Role Play and Hands-On Practice (60 mins)**<br><br>• Divide students into small groups (3-4 members per group)<br>• Each student takes turns performing the following roles:<br>  ○ Rescuer 1: Performs chest compressions.<br>  ○ Rescuer 2: Manages the airway and provides rescue breaths.<br>  ○ Rescuer 3: Operates the AED and provides support.<br>• The remaining group members act as observers and provide constructive feedback based on a checklist provided by the instructor.<br>• Observers share their feedback with the performer.<br>• The instructor provides additional guidance and correction as needed.<br><br>**Phase 3: Simulation and Debriefing (45 minutes)**<br><br>• Groups participate in a real-time, high-fidelity simulation involving a cardiac arrest patient (mannequin).<br>• Students are expected to:<br>  ○ Assess the patient's condition.<br>  ○ Perform BLS techniques in the correct sequence.<br>  ○ Ensure effective teamwork and communication during the process.<br>• The instructor facilitates a discussion on:<br>  ○ Challenges faced during the activity.<br>  ○ The importance of adhering to protocols. |

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| | | ○ How to improve performance in real-life situations.<br><br>**Resources Needed**<br><br>• Mannequins (adult and pediatric).<br>• AED trainer devices.<br>• Bag-valve masks (BVMs).<br>• Feedback forms or checklists for observers. |
| NLHP2.2 | BLS for special populations | **Activity Structure (Duration: 2 hours)**<br><br>**Phase 1:Demonstration by Instructor (20 mins)**<br><br>**A. Overview of BLS Modifications for Special Populations:**<br><br>• **Pregnant Women:**<br>○ Importance of left uterine displacement (LUD) to relieve aortocaval compression.<br>○ Modifications in chest compression techniques.<br>○ Role of emergency perimortem cesarean delivery if required.<br>• **Elderly Individuals:**<br>○ Challenges like brittle ribs, osteoporosis, and comorbidities.<br>○ Importance of gentle but effective compressions.<br>• **Obese Patients:**<br>○ Adjustments for chest compressions due to thick chest walls. |

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| | | ○ Managing airway challenges due to excess tissue.<br>○ Ensuring proper placement of AED pads.<br><br>B. **Demonstration:** The instructor demonstrates the adapted BLS techniques on mannequins designed for these special populations, emphasizing key differences in approach.<br><br>**Phase 2: Role Play and Hands-On Practice (60 mins)**<br><br>**A. Group Division and Case Assignments**<br><br>• Divide students into small groups (3-4 members).<br>• Assign each group one of the following scenarios:<br>○ Pregnant woman experiencing cardiac arrest.<br>○ Elderly patient with sudden cardiac arrest.<br>○ Obese patient requiring resuscitation.<br><br>**B. Role Play Practice**<br><br>• Each group practices their assigned scenario with team members rotating through the following roles:<br>○ Rescuer 1: Leads chest compressions.<br>○ Rescuer 2: Manages the airway.<br>○ Rescuer 3: Operates the AED and assists as needed.<br>• Groups practice the specific modifications required for their assigned population. |

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| | | • Observers and instructors provide feedback using a checklist, focusing on adherence to modifications for special populations and teamwork.<br><br>**Phase 3: Simulated Emergency Scenarios and Debriefing (40 mins)**<br><br>**A. Simulated Clinical Scenario**<br><br>• Each group participates in a high-fidelity simulated emergency scenario involving their assigned special population.<br>• They are expected to:<br>  ○ Assess the patient's condition.<br>  ○ Implement BLS techniques adapted for their specific population.<br>  ○ Demonstrate effective communication and teamwork under pressure.<br><br>**B. Debriefing and Discussion**<br><br>• The instructor facilitates a discussion on:<br>  ○ Unique challenges faced in each special population.<br>  ○ Corrective actions for observed errors.<br>  ○ Key takeaways to improve real-life performance.<br><br>**Resources Needed**<br><br>• Specialized mannequins for pregnant women, elderly, and obese patients. |

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| | | • AED trainer devices.<br>• Bag-valve masks (BVMs).<br>• Feedback forms or checklists tailored for special populations. |

**Topic 3 نزف الدم کی اصلاحی تدابیر (Emergency Management of Bleeding and Haemorrhage)** (LH : 0, NLHT: 0, NLHP: 5 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
|---|---|---|---|---|---|---|---|---|---|---|
| CO4 | Conduct the assement of severity of bleeding and hemorrhage through a systematic evaluation of vital signs and clinical presentation. | PSY-COR | MK | SH | D, SIM | DOPS, SP, DOPS, OSPE | F&S | 1 | - | NLHP3.1 |
| CO4 | Demonstrate effective techniques for controlling external bleeding, including direct pressure, elevation, the use of tourniquets when appropriate, and suturing techniques for wound closure. | PSY-GUD | MK | SH | SIM, D | SP, DOPS, OSPE, DOPS | F&S | 1 | - | NLHP3.2 |
| CO4 | Demonstrate process to initiate appropriate resuscitation measures for patients with significant haemorrhage, including fluid replacement and monitoring of hemodynamic status. | PSY-GUD | MK | SH | RP | DOPS, SP, OSCE, DOPS | F&S | 1 | - | NLHP3.3 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
|---|---|---|
| NLHP3.1 | Assessment of severity of bleeding/hemorrhage | **Activity Plan (1 hour)** |

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| | | **1. Introduction to Bleeding and Hemorrhage Assessment (10 mins)**<br><br>• Briefly explain the different types of bleeding (e.g., arterial, venous, capillary) and their clinical implications.<br>• Discuss the key signs and symptoms of hemorrhage, including pallor, tachycardia, hypotension, and altered mental status.<br>• Introduce the systematic approach to assessing bleeding severity, focusing on the evaluation of vital signs (heart rate, blood pressure, respiratory rate, temperature) and clinical presentation (e.g., bleeding site, volume, and color).<br><br>**2. Practical Demonstration of Assessment Techniques (10 mins)**<br><br>• Demonstrate the process of evaluating a patient for hemorrhage, emphasizing key steps:<br>  ○ **Step 1:** Identify bleeding source and assess the type and amount of bleeding (external or internal).<br>  ○ **Step 2:** Evaluate the patient's vital signs (blood pressure, pulse rate, respiratory rate).<br>  ○ **Step 3:** Look for signs of shock (pallor, diaphoresis, dizziness, weakness).<br>  ○ **Step 4:** Assess clinical signs of hemorrhagic shock (e.g., altered consciousness, cold extremities, delayed capillary refill).<br>• Provide a hands-on demonstration of using vital signs monitors or manual techniques (e.g., pulse check, blood pressure measurement). |

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| | | **3. Small Group Practical Exercise: Simulated Hemorrhage Assessment (30 mins)**<br><br>• Divide students into small groups (3-4 students per group).<br>• Each group will rotate between different stations where simulated patients (using mannequins or actors) present with various hemorrhage scenarios. Scenarios can include:<br>  ○ **Scenario 1:** Arterial bleeding with hypotension and tachycardia.<br>  ○ **Scenario 2:** Venous bleeding with stable vitals but signs of blood loss.<br>  ○ **Scenario 3:** Internal hemorrhage with signs of shock but no external bleeding.<br>  ○ **Scenario 4:** Mild external bleeding with normal vitals.<br>• Students at each station will:<br>  ○ Conduct a thorough clinical assessment, including vital signs, and evaluate clinical presentation.<br>  ○ Classify the severity of bleeding (mild, moderate, severe) based on their findings.<br>  ○ Record their observations and prioritize immediate interventions (e.g., compression, elevation, fluid resuscitation, surgical consult).<br>• 7-8 minutes per group at each station, rotating through 4 stations.<br><br>**4. Debriefing and Discussion (10 mins)** |

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| | | • After the exercise, gather the students to discuss each scenario and the students' assessments.<br>• Provide feedback on the accuracy of their bleeding severity classification and evaluation of clinical signs.<br>• Emphasize the importance of identifying hemorrhagic shock early and initiating appropriate interventions.<br><br>**Materials Required**<br><br>• Simulated patient mannequins or role-play actors.<br>• Vital signs monitoring equipment (manual or electronic).<br>• Scenario cards describing different hemorrhage cases.<br>• Triage or hemorrhage severity classification sheets.<br>• Pen and paper for student documentation.<br>• Suturing Pad |
| NLHP3.2 | Effective techniques for bleeding control | **Activity Plan (2 hours)**<br><br>**1. Introduction and Overview (15 mins)**<br><br>• Briefly discuss the types of external bleeding (arterial, venous, capillary) and their significance in patient management.<br>• Introduce the principles of hemorrhage control:<br>  ○ Direct pressure: First-line approach.<br>  ○ Elevation: Reduces blood flow to the injured area.<br>  ○ Tourniquets: Indicated for severe arterial bleeding that cannot be controlled by other methods. |

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| | | ○ Suturing: Wound closure for long-term control and wound healing.<br>• Discuss when each technique is most appropriate and their limitations.<br><br>**2. Demonstration of Techniques (25 mins)**: Demonstrate each technique step by step:<br><br>1. **Direct Pressure:**<br>○ Apply gauze or sterile dressings to the wound and exert firm, steady pressure.<br>○ Emphasize the importance of maintaining pressure until bleeding stops or other measures are taken.<br>2. **Elevation:**<br>○ Elevate the affected limb above the heart level to reduce venous pressure.<br>○ Demonstrate in the context of different types of wounds.<br>3. **Tourniquet Application:**<br>○ Demonstrate the proper placement of a tourniquet (e.g., 2-3 inches above the wound, tight enough to stop blood flow, but not excessively tight to cause permanent damage).<br>○ Discuss the use of commercial and improvised tourniquets.<br>4. **Suturing Techniques:** |

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| | | ○ Explain the basics of wound closure (e.g., when to suture, the choice of suture material, and needle size).<br>○ Demonstrate the correct suturing technique, including proper handling of instruments and needle insertion, suture placement, and knot tying.<br><br>**Time Allocation:** Spend 5-6 minutes demonstrating each technique.<br><br>**3. Group Practice Stations (40 mins)**<br><br>• Divide students into small groups (4-5 students per group).<br>• Prepare practice stations with mannequins or wound simulators and the necessary supplies (gauze, bandages, tourniquets, suture kits).<br>• Each group will rotate through the stations to practice the techniques demonstrated.<br><br>**Station 1: Direct Pressure and Elevation (10 minutes):**<br><br>• Students practice applying direct pressure and elevating a limb with an actively bleeding wound.<br>• Emphasis on pressure consistency and correct elevation technique.<br><br>**Station 2: Tourniquet Application (10 minutes):** |

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| | | • Students practice applying a tourniquet on simulated severe bleeding injuries.<br>• Emphasis on proper placement, tension, and monitoring for ischemia.<br><br>**Station 3: Suturing Techniques (10 minutes):**<br><br>• Students practice suturing using simulated wound models.<br>• Focus on aseptic technique, suture placement, and knot tying.<br>• Each student should be given a chance to suture a wound from start to finish.<br><br>**Time Allocation:** 10 minutes per station, rotate between 3 stations for 40 minutes.<br><br>**4. Supervised Practice and Troubleshooting (15 mins)**<br><br>• Provide individual supervision and feedback at each station.<br>• Offer guidance and troubleshooting if students encounter difficulties (e.g., improper pressure application, incorrect tourniquet placement, or difficulty suturing).<br>• Correct and refine techniques as needed.<br><br>**5. Debriefing and Discussion (15 mins)**<br><br>• After completing the stations, gather the students to review their experiences. |

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| | | • Discuss challenges they faced and solutions to improve the techniques.<br>• Emphasize key points, such as the timing of tourniquet application, the importance of pressure in controlling bleeding, and the proper technique for suturing.<br>• Encourage students to ask questions about any concerns or difficulties encountered during the practice.<br><br>**Materials Required**<br><br>• **For Direct Pressure and Elevation:**<br>  ○ Gauze pads, sterile dressings, bandages, and sterile gloves.<br>  ○ Pillows or supports for limb elevation.<br>• **For Tourniquet Application:**<br>  ○ Commercial tourniquets (e.g., Combat Application Tourniquet).<br>  ○ Improvised tourniquets (e.g., belts, cloth strips).<br>• **For Suturing:**<br>  ○ Suture kits (needles, sutures, forceps, scissors, needle holders).<br>  ○ Wound simulators or mannequins with simulated skin (e.g., silicone or latex skin).<br>  ○ Antiseptic solutions for wound preparation (optional for realism). |

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| NLHP3.3 | Resuscitation for patients with fluid loss and haemorrhage. | **Activity Plan (2 hour)**<br>• Students will work in small groups to role-play scenarios involving a patient with significant hemorrhage.<br>• Each group will be assigned a specific case (e.g., traumatic injury, gastrointestinal bleeding) and will practice initiating appropriate resuscitation measures, including fluid replacement protocols and monitoring vital signs.<br>• After each role-play, groups will discuss their decision-making process and receive feedback from peers and instructors. |

**Topic 4 غیرمتوازن دماغی حالت کے مریضوں کا ابتدائی استحکام (Initial Stabilization of Patients with Altered Mental Status)** (LH : 0, NLHT: 0, NLHP: 4 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
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| CO4 | Demonstrate the ability to identify and assess common causes of altered mental status through systematic evaluation, including rapid assessment for immediate life threats. | PSY-GUD | MK | SH | D, SIM | CHK, SP | F&S | 1 | - | NLHP4.1 |
| CO4 | Demonstrate the ability to initiate stabilization techniques to protect airway, breathing, and circulation while organizing for further assessment of the patient. | PSY-GUD | MK | SH | TBL, PT, RP | DOPS, OSPE, DOPS | F&S | 1 | - | NLHP4.2 |
| CO4 | Perform a focused neurological examination in a patient with altered mental status, including using the Glasgow Coma Scale (GCS) and pupil checks, to assess the severity and monitor progress. | PSY-MEC | MK | SH | SIM, D, CBL | DOPS, C-VC, DOPS | F&S | 1 | - | NLHP4.3 |

| Non Lecture Hour Theory | | |
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| **S.No** | **Name** | **Description of Theory Activity** |
| **Non Lecture Hour Practical** | | |
| **S.No** | **Name** | **Description of Practical Activity** |
| NLHP4.1 | Assessment of altered mental status. | **Activity Structure (2 hours)**<br><br>**1. Introduction to Altered Mental Status (15 mins)**<br><br>• Provide an overview of altered mental status (AMS), including the definition, causes (e.g., hypoglycemia, stroke, intoxication, infections, seizures), and the importance of rapid assessment.<br>• Discuss how AMS may present (e.g., confusion, agitation, lethargy, coma) and how it can indicate life-threatening conditions.<br>• Introduce the systematic approach to AMS evaluation, emphasizing the ABCDE (Airway, Breathing, Circulation, Disability, Exposure) method for quick identification of life-threatening conditions.<br>• Explain the importance of obtaining a thorough history, conducting a physical examination, and using diagnostic tools (e.g., blood glucose levels, CT scan, toxicology screen).<br>• Introduce the Mini-Mental State Examination (MMSE) as a key tool to assess cognitive function in AMS cases. |

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| | | **2. Demonstration of Systematic Evaluation (20 mins)**: Demonstrate the systematic approach to assessing a patient with AMS. The steps include:<br><br>• **Step 1: Airway (A):** Ensure the airway is patent. Look for signs of obstruction (e.g., foreign body, swelling).<br>• **Step 2: Breathing (B):** Assess for signs of respiratory distress or hypoxia (e.g., cyanosis, labored breathing).<br>• **Step 3: Circulation (C):** Check pulse, blood pressure, and skin perfusion. Look for signs of shock or hypoperfusion.<br>• **Step 4: Disability (D):** Neurological assessment using the AVPU (Alert, Verbal response, Painful stimulus, Unresponsive) scale or GCS (Glasgow Coma Scale).<br>• **Step 5: Exposure (E):** Inspect the patient for signs of trauma, infection, or other causes (e.g., drug overdose, infection, head trauma).<br>• Demonstrate how to conduct a quick and efficient physical examination focused on life-threatening causes, including:<br>  ○ Checking blood glucose levels (for hypoglycemia).<br>  ○ Performing a rapid neurological assessment (e.g., checking pupil response, limb movement).<br>  ○ Observing for signs of infection (e.g., fever, rash).<br>  ○ Identifying signs of drug or alcohol toxicity (e.g., dilated pupils, slurred speech).<br>• **Demonstrate MMSE**:<br>  ○ Orientation (Time & Place)<br>  ○ Registration (Recall three words) |

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| | | ○ Attention & Calculation (Serial 7s)<br>○ Recall (Delayed recall of words)<br>○ Language (Naming, Repetition, Writing)<br>○ Visuospatial Skills (Copying a drawing)<br><br>**3. Small Group Station Rotations (40 mins)**<br><br>• Divide students into small groups (3-4 students per group).<br>• Set up simulation stations with mannequins or role-play actors simulating different cases of altered mental status.<br>• Each group will rotate between stations to perform their assessment and diagnosis. The stations will include various scenarios such as:<br>○ **Scenario 1:** A patient presenting with confusion, slurred speech, and hypoglycemia.<br>○ **Scenario 2:** A patient with agitation and altered consciousness due to alcohol intoxication.<br>○ **Scenario 3:** A patient with a sudden decrease in responsiveness, suggestive of a stroke.<br>○ **Scenario 4:** A patient showing signs of infection with fever and confusion (sepsis).<br>○ **Scenario 5:** A patient with signs of head trauma and confusion (TBI).<br>• At each station, students will:<br>1. Perform a rapid ABCDE assessment.<br>2. Take a brief medical history (if using actors). |

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| | | 3. Use the Mini-Mental State Examination (MMSE) for cognitive screening.<br>4. Identify possible causes of altered mental status.<br>5. Recommend immediate interventions based on their findings (e.g., glucose administration, oxygen, IV fluids, seizure precautions).<br><br>**Time Allocation:** 8 minutes per station, rotating through 5 stations.<br><br>**4. Hands-on Practice with Tools (15 mins)**<br><br>• Provide students with relevant tools such as glucometers, blood pressure cuffs, oxygen saturation monitors, and other diagnostic equipment.<br>• Students will practice using these tools to assess AMS in a controlled environment. They will perform rapid assessments on mannequins or simulated patients to identify immediate life threats (e.g., hypoglycemia, hypoxia).<br>• Mini-Mental State Examination (MMSE) forms (each student performs MMSE on a peer).<br><br>**Time Allocation:** 15 minutes for hands-on practice with feedback from the facilitator.<br><br>**5. Case Discussion and Debriefing (10 mins)**<br><br>• Review all cases, discussing correct diagnoses and interventions. |

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| | | • Analyze MMSE results: Discuss cognitive impairment in AMS.<br>• Highlight differentiating common AMS causes (stroke vs. hypoglycemia vs. intoxication).<br>• Provide feedback on systematic approach.<br><br>**6. Q&A and Wrap-up (10 mins)**<br><br>• Address **student questions**.<br>• Reinforce ABCDE assessment, MMSE use, and rapid intervention.<br>• Encourage clinical reasoning in AMS management.<br><br>**Materials Required**<br><br>• **Simulation Setup:**<br>  ○ Mannequins or actors simulating altered mental status scenarios.<br>  ○ Glucometers, oxygen saturation monitors, blood pressure cuffs, and stethoscopes.<br>  ○ Medical history cards (for role-play actors, if used).<br>• **Diagnostic Tools:**<br>  ○ Portable ECG monitor (optional).<br>  ○ Pupil gauges for neurological assessment.<br>  ○ Rapid-response medical kits (including glucose, naloxone, oxygen, etc.).<br>  ○ Mini-Mental State Examination (MMSE) scoring sheets. |

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| NLHP4.2 | ABC Stabilization and Coordination in Emergency Situations | **Activity Plan (1 hour):**<br><br>**1. Introduction and Demonstration (10 Mins)**<br><br>• Briefly explain the principles of airway, breathing, and circulation (ABCs) and their importance in stabilizing patients.<br>• Demonstrate:<br>  ○ Airway techniques: Head-tilt-chin-lift, jaw thrust, suctioning.<br>  ○ Breathing techniques: Bag-valve-mask ventilation, oxygen therapy setup.<br>  ○ Circulation techniques: CPR chest compressions and controlling external bleeding.<br>•<br><br>**2. Student Hands-On Practice (40 Mins)**<br><br>• Divide students into groups of 4-5.<br>• Set up **3 skill stations** to simulate different emergency scenarios requiring ABC stabilization:<br>  ○ **Station 1:** Airway obstruction (e.g., unconscious patient needing head-tilt-chin-lift and suctioning).<br>  ○ **Station 2:** Breathing difficulty (e.g., patient requiring bag-valve-mask ventilation and oxygen therapy).<br>  ○ **Station 3:** Circulation support (e.g., patient with cardiac arrest requiring chest compressions or external bleeding requiring direct pressure). |

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| | | • Each student takes turns performing stabilization techniques at each station under supervision.<br>• Rotate groups between stations every 10 minutes.<br>• Practice organizing for further assessment by providing a structured verbal handover (e.g., SAMPLE history: Symptoms, Allergies, Medications, Past medical history, Last oral intake, Events leading up).<br>• Guide students on correct technique and positioning.<br>• Provide real-time feedback on performance and communication skills.<br><br>**3. Group Discussion and Feedback (10 Mins)**<br><br>• Recap the ABC steps and common challenges observed during practice.<br>• Encourage students to reflect on their performance and suggest areas for improvement.<br>• Emphasize the importance of communication and teamwork during stabilization.<br><br>**Materials Required:**<br><br>1. Airway management tools:<br>o Manikins for airway practice.<br>o Suctioning device.<br>o Bag-valve-mask (BVM) setups.<br>o Oxygen cylinder with masks/cannulas.<br>2. Circulation tools: |

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| | | ○ CPR manikins (adult and pediatric).<br>○ Simulated bleeding kits (e.g., gauze, tourniquets).<br>3. Stopwatch or timer for time-bound rotations.<br>4. Handouts with structured verbal handover format (e.g., SAMPLE, SBAR).<br>5. Feedback checklists for facilitators. |
| NLHP4.3 | Neurological examination in a patient with altered mental status | **Activity Plan (1 hour)**<br><br>**1. Introduction to Focused Neurological Examination (10 mins)**<br><br>• Briefly introduce the concept of a neurological examination in patients with altered mental status.<br>• Discuss the importance of assessing consciousness, pupillary response, motor function, and responsiveness in evaluating the severity of the condition.<br>• Explain the **Glasgow Coma Scale (GCS)**:<br>○ Eye opening (E): 4 points<br>○ Verbal response (V): 5 points<br>○ Motor response (M): 6 points<br>• Explain how to conduct a **pupil check** (assessing size, symmetry, reaction to light, and accommodation).<br>• Emphasize the importance of using these tools for monitoring progress and identifying changes in a patient's neurological status. |

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| | | **2. Demonstration of Neurological Examination Techniques (15 mins)** on a mannequin or volunteer (role-play patient).<br><br>• **GCS Assessment:**<br>  ○ Demonstrate the assessment of **eye response**, **verbal response**, and **motor response**.<br>  ○ Highlight how to evaluate different verbal responses (e.g., orientated, confused, inappropriate words, etc.).<br>  ○ Show how to assess motor responses (e.g., purposeful movements, abnormal flexion/extension).<br>• **Pupil Checks:**<br>  ○ Demonstrate the steps involved in assessing pupil size, shape, symmetry, reaction to light, and accommodation.<br>  ○ Discuss how changes in pupillary reactions can indicate specific neurological conditions (e.g., unilateral dilated pupil in case of brain herniation).<br>• Encourage students to ask questions during the demonstration and clarify any doubts.<br><br>**3. Hands-on Practice (25 mins)**<br><br>• Set up multiple simulation stations with mannequins or role-play patients (trained actors).<br>• Each student will rotate through the stations, where they will perform a focused neurological examination on patients with different presentations of altered mental status. |

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| | | • Each station will have a scenario, such as:<br>  ○ **Scenario 1:** Patient with a suspected stroke.<br>  ○ **Scenario 2:** Patient with head trauma following a fall.<br>  ○ **Scenario 3:** Patient presenting with confusion due to hypoglycemia.<br>  ○ **Scenario 4:** Patient with signs of overdose and altered consciousness.<br>• Students will work in pairs or small groups. One student will perform the neurological examination while the other observes, and they will switch roles after each scenario.<br>• At each station, students will:<br>  ○ Assess the GCS (eye response, verbal response, and motor response).<br>  ○ Conduct pupil checks (size, reaction to light, and symmetry).<br>  ○ Record the GCS score and any relevant findings.<br>  ○ Make an initial assessment of the severity of the condition based on their findings.<br><br>**Time Allocation:** 5 minutes per student to assess the patient at each station, rotating through the different scenarios.<br><br>**4. Group Reflection and Discussion (10 mins)**<br><br>• After completing the hands-on practice, bring the students together to discuss their findings. |

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| | | • Ask students to share their experiences, including any challenges they faced while performing the assessment.<br>• Facilitate a discussion on:<br>  ○ How accurate and consistent the GCS scoring was.<br>  ○ Differences in the neurological presentation of altered mental status.<br>  ○ Importance of repeat assessments for monitoring changes in the patient's condition.<br><br>**5. Q&A and Wrap-up (5 mins)**<br><br>• Open the floor for any final questions or clarifications.<br>• Summarize the key points of the activity:<br>  ○ The importance of using the GCS and pupil checks for assessing altered mental status.<br>  ○ How to interpret the findings and decide on immediate interventions based on the results.<br>• Emphasize that these assessments should be part of a structured approach to managing patients with altered mental status, especially in an emergency setting.<br><br>**Materials Required:**<br><br>• **Simulation Setup:**<br>  ○ Mannequins or role-play actors simulating patients with altered mental status.<br>  ○ GCS scoring cards or charts for reference.<br>  ○ Pupil gauges for checking pupil size and response. |

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| | | • **Diagnostic Tools:**<br>  ○ Penlight (for pupil checks).<br>  ○ GCS assessment sheets to record scores.<br>  ○ Stopwatch for timed assessments (optional). |

**Topic 5 اصلاحی ادویہ کا انتظام (Emergency Medication Administration)** (LH : 0, NLHT: 0, NLHP: 6 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
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| CO4 | Demonstrate the ability to identify and select appropriate emergency medications based on the clinical presentation, following standard treatment protocols. | PSY-MEC | MK | SH | CBL | OSCE, PP-Practical | F&S | 2 | - | NLHP5.1 |
| CO4 | Demonstrate the safe administration of commonly used emergency medications, including preparation, dosage calculation, and route of administration, adhering to established guidelines. | PSY-COR | MK | SH | CBL, RP, D | OSCE, Mini-CEX, DOPS, DOPS | F&S | 2 | - | NLHP5.2 |
| CO4 | Demonstrate the ability to identify and respond effectively to adverse reactions of emergency medications by identifying early warning signs and implementing appropriate corrective actions. | PSY-ADT | MK | SH | PL, SIM | OSCE, Mini-CEX, DOPS, DOPS | F&S | 2 | - | NLHP5.3 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
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| NLHP5.1 | Medication Selection in Simulated Emergency Scenarios | **Activity Plan (2 hours)**<br><br>**1. Introduction (20 mins)**<br><br>• Provide a brief overview of commonly used emergency medications (e.g., adrenaline, atropine, naloxone, nitroglycerin, diazepam, etc.).<br>• Explain the criteria for medication selection based on clinical presentations (e.g., chest pain, anaphylaxis, overdose).<br><br>**2. Case-Based Activity (80 mins)**<br><br>• Divide students into small groups.<br>• Provide each group with case scenarios requiring medication selection. Examples:<br>  ○ A patient with anaphylaxis.<br>  ○ A patient with opioid overdose.<br>  ○ A patient with bradycardia.<br>• Each group will:<br>  ○ Analyze the clinical presentation.<br>  ○ Identify the appropriate medication.<br>  ○ Justify their choice based on treatment protocols.<br>• The facilitator will guide discussions and provide feedback on the rationale for medication selection.<br><br>**3. Wrap-Up and Discussion (20 mins)**<br><br>• Summarize key takeaways from the activity. |

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| | | • Clarify doubts and highlight critical points for medication selection.<br><br>**Materials Required:**<br><br>• Case scenarios (printed handouts or digital slides).<br>• Reference charts for emergency medications (e.g., indications, dosages, contraindications).<br>• Whiteboard/flipchart for group discussions.<br>• Medication cards or labels for commonly used emergency drugs (e.g., adrenaline, naloxone, atropine, nitroglycerin).<br>• Access to clinical guidelines (digital or printed) for standard treatment protocols (e.g., ACLS, PALS).<br>• Timer to manage group activity. |
| NLHP5.2 | Safe administration of emergency medications | **Activity Plan (2 Hours)**<br><br>**1. Introduction and Demonstration (20 mins)**<br><br>• Demonstrate the preparation and administration of a few common emergency medications, such as:<br>  ○ Adrenaline via intramuscular injection.<br>  ○ Naloxone via intravenous administration.<br>  ○ Salbutamol via nebulizer.<br>• Discuss the importance of proper dosage calculation and adherence to protocols. |

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| | | **2. Hands-On Practice (80 mins)**<br><br>• Provide students with simulation kits (dummy syringes, drug labels, vials, and saline).<br>• Assign individual tasks where each student practices:<br>  o Preparing the medication.<br>  o Simulating administration using manikins or models.<br>• Facilitator will observe and provide feedback on students' techniques, ensuring adherence to safety protocols.<br><br>**3. Wrap-Up (20 mins)**<br><br>• Reinforce the importance of accuracy and safety in medication administration.<br><br>**Materials Required:**<br><br>1. Simulation kits:<br>  o Dummy syringes (various sizes).<br>  o Medication vials (mock or empty).<br>  o aline solution bottles.<br>2. Drug labels for commonly used medications (adrenaline, naloxone, salbutamol, etc.).<br>3. Manikins for practice:<br>  o Adult and pediatric models for injections and IV administration.<br>  o Nebulizer models for salbutamol administration.<br>4. Calculators or dosage calculation guides. |

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| | | 5. Gloves and alcohol swabs for aseptic technique practice.<br>6. Medication administration records/logs (printed or digital) for practice. |
| NLHP5.3 | Identifying and Managing Adverse Reactions to Emergency Medications | **Activity Plan (2 hour)**<br><br>**1. Introduction (20 mins)**<br><br>• Discuss common adverse reactions to emergency medications (e.g., anaphylaxis from antibiotics, hypotension from nitroglycerin).<br>• Explain how to monitor for early warning signs.<br><br>**2. Simulated Scenario Practice ( 80 mins)**<br><br>• Divide students into pairs or small groups.<br>• Provide simulation scenarios that include adverse reactions. Examples:<br>o A patient develops an allergic reaction after adrenaline administration.<br>o Hypotension occurs after nitroglycerin administration.<br><br>• Each group identifies the adverse reaction.<br>• Demonstrates appropriate corrective actions, such as stopping the medication, administering a reversal agent, or initiating supportive measures. |

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| | | **3. Wrap-Up (20 mins)**<br><br>• Provide feedback on group performance.<br>• Emphasize the importance of vigilance in monitoring for and managing adverse reactions.<br><br>**Materials Required:**<br><br>1. Simulation kits:<br>  o Manikins for demonstration and response practice.<br>  o Mock emergency drug kits, including reversal agents (e.g., epinephrine, antihistamines).<br>2. Pre-designed adverse reaction scenarios (printed or on slides).<br>3. Monitoring equipment:<br>  o Mock or functional vital sign monitors.<br>  o Pulse oximeters.<br>4. Algorithm posters for managing adverse reactions (e.g., anaphylaxis protocols).<br>5. Crash cart setup (mock) with necessary equipment for responding to emergencies.<br>6. Checklists for adverse reaction management steps. |

**Topic 6 حاد درد کا تجزیہ و تدابیر (Assessment and Management of Acute Pain)** (LH : 0, NLHT: 0, NLHP: 4 hours)

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| CO4 | Demonstrate a structured approach to assessing acute pain, including history-taking and physical examination. | PSY-GUD | MK | SH | DIS, SIM, PL | PA, DOPS, P-EXAM, DOPS | F&S | 2 | - | NLHP6.1 |
| CO4 | Apply pain management techniques appropriate to the severity and source of pain, using both pharmacologic and supportive measures. | PSY-GUD | MK | SH | SIM | PA, P-EXAM, DOPS, DOPS | F&S | 2 | - | NLHP6.2 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
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| NLHP6.1 | Assessment of acute pain. | **Activity Plan (2 hours)**<br><br>**1. Introduction and Demonstration**<br><br>• Provide a brief overview of the structured approach to pain assessment:<br>• Use of pain assessment frameworks (e.g., OPQRST: Onset, Provocation, Quality, Region/Radiation, Severity, Timing).<br>• Importance of pain scales (e.g., Numeric Rating Scale, Wong-Baker Faces Pain Scale).<br>• Demonstrate a role-play scenario with a standardized patient or colleague to showcase proper history-taking. |

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| | | • Demonstrate a physical examination techniques focused on pain assessment (e.g., palpation, inspection, range of motion, and identification of referred pain).<br><br>**2. Small-Group Practice**<br><br>• Divide students into small groups (4-5 per group).<br>• Assign each group to a simulated station with:<br>  o Standardized patients (actors or faculty volunteers).<br>  o Simulated clinical scenarios with varying presentations of acute pain (e.g., chest pain, abdominal pain, musculoskeletal pain).<br>• Each student will take turns performing history-taking and physical examination on the standardized patient. Record findings systematically and propose preliminary assessments.<br>• Facilitator will rotate between groups to observe, guide, and provide feedback on students' history-taking and physical examination skills.<br><br>**3. Discussion and Feedback**<br><br>• Reconvene all groups.<br>• Ask each group to briefly present their case, findings, and initial impressions.<br>• Provide feedback on:<br>  o The depth and organization of history-taking.<br>  o The technique and thoroughness of physical examination. |

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| | | ○ Proper use of pain assessment tools (e.g., scales).<br>• Highlight common mistakes and best practices.<br><br>**Materials Required:**<br><br>1. Standardized patient actors or faculty members for role-play.<br>2. Simulated case scenarios with acute pain presentations (printed handouts).<br>3. Pain assessment scales (e.g., Numeric Rating Scale, Visual Analog Scale).<br>4. Physical examination tools:<br>○ Stethoscopes.<br>○ Reflex hammers.<br>○ Blood pressure monitors.<br>○ Pain diagram charts.<br>5. Feedback checklists for facilitators to use during group activities.<br>6. Whiteboard or flipchart for summarizing key points during the discussion. |
| NLHP6.2 | Pain management in emergency conditions. | **Activity Plan ( 2 hours)**<br><br>**1. Introduction and Briefing**<br><br>• Deliver a short presentation on pain management techniques: |

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| | | ○ Pharmacologic measures (e.g., paracetamol, NSAIDs, opioids, adjuvant therapies like muscle relaxants).<br>○ Supportive measures (e.g., positioning, ice/heat therapy, distraction techniques, and breathing exercises).<br>• Provide examples of matching pain severity and source with management strategies (e.g., mild pain: NSAIDs; severe pain: opioids with adjuvants).<br><br>**2. Simulated Patient Stations**<br><br>• Divide students into small groups (4-5 per group).<br>• Set up 3 simulation stations with standardized patients or manikins. Each station will present a different case:<br><br>1. Mild pain (e.g., tension headache or musculoskeletal strain).<br>2. Moderate pain (e.g., renal colic or post-operative pain).<br>3. Severe pain (e.g., trauma or cancer pain).<br><br>○ Each student will assess the patient and determine the severity and source of pain.<br>○ Rotate among stations to observe and guide the students' approach.<br>○ Provide real-time feedback on their choice of interventions and technique.<br>○ Students will select appropriate management strategies: |

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| | | ○ *Pharmacologic*: Indicate or simulate the administration of medications (e.g., oral analgesics, IV opioids).<br>○ *Supportive*: Demonstrate techniques such as patient positioning, applying ice/heat, or teaching breathing exercises.<br><br>3. **Group Debrief and Feedback**<br><br>• Discuss each case briefly with the group:<br>○ What pain management strategies were chosen?<br>○ Were they appropriate to the severity and source of pain?<br>• Reinforce the importance of balancing pharmacologic and supportive measures.<br>• Highlight common errors and best practices observed during the simulation.<br><br>**Materials Required:**<br><br>1. Case scenarios (printed handouts or digital slides).<br>2. Simulation setup:<br>○ Manikins or standardized patients for role-play.<br>○ Mock medication vials, syringes, and pill containers.<br>3. Supportive care supplies:<br>○ Ice packs, heat packs, pillows for positioning.<br>○ Visual aids for breathing exercises or distraction techniques. |

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| | | | | | 4. Pain scales (Numeric Rating Scale, Wong-Baker Faces).<br>5. Feedback checklist for facilitators. | | | | | |
| **Topic 7 اصابتی نگہداشت میں یونانی معالجہ کا استعمال (Use of Unani Therapeutics in Emergency Care)** (LH : 0, NLHT: 0, NLHP: 14 hours) | | | | | | | | | | |
| **A3** | **B3** | **C3** | **D3** | **E3** | **F3** | **G3** | **H3** | **I3** | **J3** | **K3** |
| CO4 | Acquire the ability to alleviate acute pain in emergency situations by implementing Unani therapeutic approaches | PSY-COR | MK | SH | W, SIM | Mini-CEX, DOPS, OSCE, DOPS | F&S | 2 | - | NLHP7.1 |
| CO4 | Demonstrate the ability to alleviate the symptoms of acute GI distress (e.g., nausea, vomiting, colic, acute diarrhoea, etc) by implementing Unani therapeutic approaches (regimens/medicines) ensuring proper technique and monitoring. | PSY-COR | MK | SH | ML, SIM, CBL | OSCE, Mini-CEX, DOPS, DOPS | F&S | 2 | - | NLHP7.2 |
| CO4 | Demonstrate the ability to apply Unani topical preparations for wound care, including the correct method of application and dressing in emergency situations | PSY-COR | MK | SH | RP, W | OSCE, Mini-CEX, DOPS, DOPS | F&S | 2 | - | NLHP7.3 |
| CO4 | Demonstrate the application of Unani therapeutic approaches (regimens/medicines) to relieve acute respiratory symptoms, applying the remedies effectively based on patient symptoms | PSY-COR | MK | SH | CBL, SIM | OSCE, DOPS, DOPS, Mini-CEX | F&S | 2 | - | NLHP7.4 |
| CO4 | Demonstrate the administration of Unani regimens/medicines for managing shock symptoms, | PSY-COR | MK | SH | W, CBL | Mini-CEX, OSCE, | F&S | 2 | H-IBT | NLHP7.5 |

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| | focusing on stabilizing and revitalizing the patient effectively. | | | | | DOPS, DOPS | | | | |
| CO4 | Demonstrate the ability to manage a patient experiencing a seizure by implementing appropriate first aid measures and utilizing Unani therapeutic approaches during and after the seizure episode in an emergency setting. | PSY-COR | MK | SH | SIM, W | OSCE, Mini-CEX | F&S | 2 | - | NLHP7.6 |
| CO4 | Demonstrate the ability to perform important emergency regeminal techniques such as cupping therapy, venesection, or other regimen in a controlled environment to address emergency medical situations | PSY-COR | MK | SH | W, D | DOPS, OSCE, DOPS, Mini-CEX | F&S | 2 | - | NLHP7.7 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
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| NLHP7.1 | Managemet of acute pain by Unani therapeutic approaches. | **Any one of the given activities:**<br><br>**1. Simulation (2 hours)**: Conduct a simulation scenario where students must manage a patient presenting with acute pain (e.g., due to trauma or a medical condition). Students will role-play as healthcare providers, assessing the patient's condition, identifying the appropriate Unani therapeutic approaches and implementing pain relief strategies. Each group will present their management plan and demonstrate the administration of Unani therapies, discussing their rationale and expected outcomes. Following the simulation, a debriefing session will |

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| | | allow for reflection and discussion on best practices and challenges encountered.<br><br>**2. Workshop (2 hours)**: Organize a hands-on workshop where students can practice applying specific Unani therapies for pain management. Set up different stations with various Unani therapeutic approaches known for their analgesic properties. Students will rotate through stations, practicing the techniques under supervision, and receive feedback on their skills. Additionally, students can simulate patient interactions, discussing their approach and providing education to patients about the therapies being administered. |
| NLHP7.2 | Management of acute GI distress by Unani therapeutic approaches. | 1.<br><br>**Activity Plan (2 hours)**<br><br>**1. Simulation Activity (1 hour)**: Set up a clinical simulation where students manage a patient presenting with symptoms of acute GI distress (nausea, vomiting, diarrhea). Students will perform a thorough assessment, identify the appropriate Unani therapeutic approaches and monitor the patient's response to treatment. They will role-play interactions with patients and provide education about dietary modifications and medicines. A debriefing session will follow to discuss the effectiveness of the approaches used.<br><br>**2. Case-Based Learning Activity (1 hour):** Present students with case studies of patients experiencing acute GI distress. Each case will outline symptoms, medical history, and possible triggers. Students will |

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| | | work in small groups to discuss and propose a management plan using Unani therapies. They will then present their case analysis, including the rationale for their selected therapies and monitoring plans, fostering collaborative learning and critical thinking. |
| NLHP7.3 | Wound care and dressing in emergency situations using Unani topical preparations. | **Activity Plan (2 hours)**<br><br>1. **Workshop Activity (1 hour):** Organize a workshop where students practice applying Unani topical preparations for wound care. Set up stations with various wound types, and students will learn to clean, debride, and apply topical agents or use other regimens. They will also practice applying appropriate dressings, focusing on maintaining sterility and proper technique. Supervisors will provide real-time feedback on their skills and methods.<br><br>**2. Role-Playing Activity (1 hour):** Conduct a role-playing session where students simulate interactions with patients requiring wound care. Students will practice explaining the wound management process, the choice of Unani regimen, and instructions for at-home care. This helps reinforce communication skills and patient education alongside practical techniques |
| NLHP7.4 | Use of Unani therapeutic approaches in acute respiratory symptoms. | **Activity Plan (2 hours)**<br><br>**1. Simulation Activity (1 hour):** Develop a simulation scenario where students care for a patient presenting with acute respiratory symptoms (e.g., asthma attack, bronchitis). Students will assess the patient, select appropriate Unani therapeutic approach, and demonstrate how to |

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| | | administer them. They will monitor the patient's response throughout the scenario and adjust treatment as needed. A debriefing will facilitate discussion about the interventions used.<br><br>**2. Case Studies Activity (1 hour):** Provide students with case studies of patients with various acute respiratory issues. In small groups, students will analyze the symptoms and propose Unani therapeutic regimens to address the symptoms, ensuring proper technique and monitoring. They will present their plans to the class, encouraging peer feedback and discussion of different approaches. |
| NLHP7.5 | Mangement of shock using Unani regimens/medicines. | **Activity Plan (2 hours)**<br><br>**1. Hands-On Practice Activity (1 hour):** Conduct a hands-on workshop where students practice administering Unani regimens for shock management. They will simulate scenarios involving different types of shock and learn to identify signs and symptoms. Students will practice preparing and administering Unani remedies while monitoring vital signs and patient responses, receiving guidance and feedback from instructors.<br><br>**2. Case-Based Learning Activity (1 hour):** Present cases in which students must respond to a patient in shock. They will work in teams to assess the patient, develop an immediate management plan using Unani therapy, and present their approach to the class. This encourages teamwork and critical thinking under pressure, simulating real-life emergency situations. |

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| NLHP7.6 | Management of seizure by Unani therapeutic approaches | **Any one of the given activities:**<br><br>**1. Simulation Activity (2 hours):** Set up a simulation where students manage a patient experiencing a seizure. They will practice the correct first aid measures (like positioning and ensuring safety) and demonstrate the use of Unani therapeutic approaches (like postictal care). After the simulation, a debriefing will allow students to reflect on their management techniques and discuss improvements.<br><br>**2. Hands-On Practice Workshop Activity (2 hours): Provide** hands-on practice sessions where students role-play as caregivers and patients experiencing seizures. They will practice first aid techniques and how to apply Unani approaches during and after a seizure episode, reinforcing proper care and communication skills. |
| NLHP7.7 | Important emergency regeminal techniques | **Activity Plan (2hours)**<br><br>**1. Demonstration Activity (1 hour)**: Conduct a demonstration where an experienced practitioner showcases cupping therapy and venesection techniques. Students will observe the methods, indications, and contraindications, followed by a Q&A session to clarify doubts.<br><br>**2. Hands-On Workshop Activity (1 hour):** Organize a hands-on workshop where students practice performing cupping therapy, venesection and other regimens in a controlled environment. Under supervision, students will learn the technique, safety precautions, and post-procedure care, ensuring they gain confidence and competence in these emergency regimens. |

| Topic 8 اضطرابِ تنفّسی کی تدابیر (Management of Respiratory Distress) (LH : 0, NLHT: 0, NLHP: 6 hours) | | | | | | | | | | |
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| **A3** | **B3** | **C3** | **D3** | **E3** | **F3** | **G3** | **H3** | **I3** | **J3** | **K3** |
| CO4 | Conduct focused respiratory assessment of respiratory distress in patients. | PSY-COR | MK | SH | CBL, D, SIM | DOPS, Log book, SP, DOPS, OSCE | F&S | 3 | - | NLHP8.1 |
| CO4 | Demonstrate appropriate initial interventions, such as positioning and oxygen therapy. | PSY-MEC | MK | SH | L_VC, CBL, SIM, D | C-VC, OSCE | F&S | 3 | - | NLHP8.2 |
| CO4 | Demonstrate the ability to identify indications for referral in cases of severe respiratory distress or failure through systematic assessment and clinical reasoning. | PSY-MEC | MK | SH | CBL, RP | T-CS, SP, QZ | F&S | 3 | - | NLHP8.3 |

**Non Lecture Hour Theory**

| **S.No** | **Name** | **Description of Theory Activity** |
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**Non Lecture Hour Practical**

| **S.No** | **Name** | **Description of Practical Activity** |
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| NLHP8.1 | Assessment of respiratory distress in patients | **Activity Plan (2 hours):**<br><br>**1. Demonstration and Guided Practice (1 hour)**<br><br>o An instructor will demonstrate a focused respiratory assessment on a volunteer or a simulation manikin. The |

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| | | demonstration should include key components such as inspection, palpation, percussion, and auscultation.<br>○ After the demonstration, students will pair up to practice the focused respiratory assessment on each other or on manikins. Instructors will observe and provide guidance as needed, ensuring students understand the importance of each assessment step.<br><br>**2. Case-Based Learning (1 hour)**<br><br>2.<br><br>○ Present students with various case scenarios that describe patients with different levels of respiratory distress (e.g., mild asthma exacerbation, pneumonia, acute respiratory distress syndrome).<br>○ In small groups, students will discuss the specific assessment findings they would expect in each case and the significance of these findings. They will also identify how these findings guide their management of the patient.<br>○ Each group can practice conducting focused assessments on their scenarios, either through role play or using simulation manikins, followed by presenting their findings to the class.<br><br>**3. Simulation (optional):**<br><br>• |

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| | | • Create a realistic scenario where students must assess a patient exhibiting respiratory distress. This could be set up in a skills lab with high-fidelity manikins or standardized patients.<br>• Students will perform a focused respiratory assessment, noting signs and symptoms such as respiratory rate, effort, use of accessory muscles, oxygen saturation, and lung auscultation results.<br>• After the simulation, conduct a debriefing session where students reflect on their assessment process, discussing challenges faced and areas for improvement. Instructors can provide additional insights into the clinical significance of their findings. |
| NLHP8.2 | Initial interventions in respiratory distress | Activity Plan (2 hours)<br><br>**1. Demonstration and Hands-On Practice (1 hour)**<br><br>• The instructor will demonstrate appropriate initial interventions, including proper positioning (e.g., sitting up, using a tripod position) and administering supplemental oxygen using different devices (nasal cannula, non-rebreather mask). Video demonstration can also be used.<br>• Students will practice both the assessment and intervention techniques in small groups, with instructors providing guidance and feedback as they simulate the scenarios. |

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| | | **2. Case-Based Learning (1 hour):**<br><br>• Present students with several patient scenarios that involve varying degrees of respiratory distress, such as chronic obstructive pulmonary disease (COPD) exacerbation or acute pulmonary edema.<br>• In groups, students will discuss and outline the assessment findings they would expect in each scenario and the rationale for their interventions<br>• Each group will then role-play and demonstrate the appropriate initial interventions, including positioning and oxygen therapy. Peers will observe and provide constructive feedback.<br><br>**Materials Required:**<br><br>**1.** Printed or Digital Case Handouts<br><br>**2.** Equipment for Role-Play and Demonstration:<br><br>• Stethoscopes.<br>• Pulse oximeters.<br>• Blood pressure monitors.<br>• Thermometers (optional, for fever assessment).<br>• **Oxygen Therapy Devices:**<br>  ○ Nasal cannulas.<br>  ○ Simple face masks.<br>  ○ Non-rebreather masks. |

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| | | ○ Bag-valve-mask (BVM) with oxygen reservoir (for severe cases).<br>• **Positioning Tools:**<br>○ Adjustable beds or chairs to demonstrate proper positioning for respiratory distress (e.g., semi-Fowler's or tripod position).<br><br>**3. Simulated Patients or Manikins:**<br><br>• Low or medium fidelity manikins to simulate respiratory distress or actors trained to role-play patients.<br><br>**3. Simulation Training (Optional):**<br><br>• Create a realistic clinical scenario using a high-fidelity manikin or standardized patient who presents with respiratory distress.<br>• Students will conduct a focused assessment, identify critical signs of respiratory distress, and demonstrate the appropriate interventions (e.g., proper positioning and initiation of oxygen therapy).<br>• Following the simulation, conduct a debriefing session where students reflect on their assessment findings and the effectiveness of their interventions. Instructors can provide additional clinical insights and reinforce best practices. |
| NLHP8.3 | Indications for referral in severe respiratory distress or failure | **Activity Plan (2 hours)** |

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| | | **1. Introduction and Demonstration (30 Mins)**<br><br>• Provide a brief overview of severe respiratory distress and failure, including:<br>  ○ Clinical signs and symptoms (e.g., use of accessory muscles, cyanosis, altered mental status).<br>  ○ Red flags requiring immediate referral (e.g., hypoxemia unresponsive to oxygen therapy, unstable vitals).<br>• Demonstrate a systematic respiratory assessment approach:<br>  ○ Primary survey (Airway, Breathing, Circulation).<br>  ○ Vital sign evaluation (pulse oximetry, respiratory rate, blood pressure).<br>  ○ Physical examination (inspection, palpation, percussion, auscultation).<br>  ○ Using clinical tools such as ABG analysis and oxygen therapy devices.<br><br>**2. Simulated Case Scenarios and Small Group Practice (1 Hour)**<br>Create **3 simulated case scenarios** involving patients with varying levels of respiratory distress. Divide students into small groups and assign one case to each group.<br><br>**Examples of Scenarios:**<br><br>• **Moderate Distress:** A patient with pneumonia presenting with tachypnea and desaturation. |

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| | | • **Severe Distress:** A patient with COPD exacerbation showing signs of impending respiratory failure.<br>• **Life-Threatening Distress:** A patient with acute anaphylaxis and rapidly progressing airway obstruction.<br><br>**Tasks for Each Group:**<br><br>• Perform a systematic assessment of the simulated patient (primary survey, vitals, physical examination).<br>• Identify red flags and determine if referral is indicated.<br>• Justify the referral decision based on assessment findings and clinical reasoning.<br><br>**Facilitator's Role:**<br><br>• Supervise group activities and provide feedback on assessment techniques.<br>• Guide students in recognizing critical signs and interpreting findings.<br><br>**3. Debriefing and Group Discussion (30 Mins)**<br><br>• Have each group present their findings and referral decisions to the entire class.<br>• Discuss:<br>  ○ Key observations from each case.<br>  ○ Correct and incorrect referral indicators. |

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| | | ○ Effective communication of referral decisions to senior staff or higher centers.<br>• Summarize the importance of timely referral in preventing respiratory failure and complications.<br><br>**Materials Required:**<br><br>1. **For Introduction and Demonstration:**<br>○ Manikins or simulated patients.<br>○ Clinical tools: stethoscopes, pulse oximeters, oxygen delivery devices (e.g., nasal cannula, face masks).<br>○ ABG result cards or printed charts.<br>○ Presentation slides or printed handouts.<br>2. **For Small Group Practice:**<br>○ Simulated case scenarios with detailed patient histories and examination findings.<br>○ Manikins or actors trained to simulate respiratory distress.<br>○ Oxygen therapy equipment for practical use.<br>3. **For Debriefing:**<br>○ Checklists for evaluating students' performance.<br>○ Summary handouts on referral criteria for respiratory distress. |

**Topic 9 صدمہ کی تدابیر اور مائیت کی بحالی (Management of Shock and Fluid Resuscitation)** (LH : 0, NLHT: 0, NLHP: 6 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
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| CO4 | Conduct rapid assessment of shock indicators in a simulated setting, including evaluation of vital signs, clinical presentation, and response to initial interventions, demonstrating appropriate clinical decision-making and prioritization. | PSY-COR | MK | SH | SIM | PA, P-EXAM, DOPS, DOPS | F&S | 3 | - | NLHP9.1 |
| CO4 | Demonstrate, through hands-on practice, how to correctly establish intravenous (IV) access and initiate appropriate fluid resuscitation techniques, selecting and adjusting fluid rates based on simulated patient needs. | PSY-GUD | MK | SH | W | DOPS, PA, P-EXAM, DOPS | F&S | 3 | - | NLHP9.2 |
| CO4 | Demonstrate in real-time simulations, how to continuously monitor vital signs, reassess patient status at intervals, and adjust fluid resuscitation interventions based on evolving clinical findings. | PSY-GUD | MK | SH | SIM | PA, P-EXAM, DOPS, DOPS | F&S | 3 | - | NLHP9.3 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
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| NLHP9.1 | Assessment of shock indicators | **Activity Plan (2 Hours)**<br><br>**1. Introduction (15 Mins)**<br><br>• Brief students on shock types, clinical indicators, and rapid assessment protocols. |

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| | | • Use slides or handouts to explain key indicators of shock (e.g., vital signs, skin changes, mental status).<br>• Outline systematic steps for rapid assessment (e.g., Airway, Breathing, Circulation, Disability, Exposure - ABCDE approach).<br>• Provide examples of shock (e.g., hypovolemic, cardiogenic, septic, and neurogenic).<br><br>**2. Simulation and Practice (90 Mins)**<br><br>**Step 1: Scenario Setup**<br><br>• Divide students into small groups (3-5 members per group).<br>• Each group is assigned a simulated patient scenario related to shock, such as:<br>  ○ **Case 1:** Hypovolemic shock due to trauma.<br>  ○ **Case 2:** Septic shock in a febrile patient.<br>  ○ **Case 3:** Cardiogenic shock in a patient with a history of myocardial infarction.<br>  ○ **Case 4:** Anaphylactic shock with airway compromise.<br><br>**Step 2: Role-Playing**<br><br>• Each group rotates through 2-3 simulation stations equipped with manikins or trained actors.<br>• At each station, students perform:<br>  ○ Rapid assessment of vital signs (e.g., heart rate, blood pressure, respiratory rate). |

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| | | ○ Observation of clinical signs (e.g., cyanosis, cool extremities, altered mental state).<br>○ Prioritization of actions (e.g., oxygen administration, fluid resuscitation, or epinephrine for anaphylaxis).<br><br>**Step 3: Feedback and Debriefing**<br><br>• Instructors and peers observe each group and provide immediate feedback on:<br>○ Clinical reasoning and prioritization.<br>○ Effective use of tools and techniques.<br>○ Communication with simulated patients or team members.<br>• Discuss how findings align with potential causes and the need for referral or interventions.<br><br>**3. Conclusion and Q&A (15 Mins)**<br><br>• Summarize key points from the scenarios, emphasizing:<br>○ The importance of rapid, systematic assessment.<br>○ Early recognition of shock indicators.<br>○ Decision-making in emergency settings.<br>• Address student questions and clarify any misconceptions.<br><br>**Materials Required**<br><br>1. **Simulation Tools:**<br>○ Manikins or trained actors for realistic scenarios. |

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| | | ○ Vital sign monitors (simulated or real equipment).<br>○ Pulse oximeters, blood pressure cuffs, and thermometers.<br>2. **Emergency Equipment:**<br>○ Oxygen delivery devices (nasal cannulas, face masks).<br>○ IV access kits with simulated fluids (e.g., saline).<br>3. **Teaching Aids:**<br>○ Case scenario handouts.<br>○ Checklist for assessing student performance (e.g., did they assess airway, breathing, and circulation systematically?).<br>○ Shock management protocols (laminated guides or posters). |
| NLHP9.2 | Establisment of intravenous (IV) access and initiation of fluid resuscitation techniques | **Activity Plan (2 Hours)**<br><br>**1. Introduction to IV Access and Fluid Resuscitation (20 Mins)**<br><br>• Provide students with an overview of IV access, fluid resuscitation principles, and indications.<br>• Introduction to the anatomy of veins for IV access.<br>• Types of intravenous fluids commonly used (e.g., crystalloids, colloids).<br>• Indications for fluid resuscitation (e.g., shock, dehydration, blood loss). |

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| | | • Key concepts: Fluid rate selection based on patient condition, age, and weight.<br>• Emphasize fluid choice (e.g., normal saline, Ringer's lactate) and adjusting rates based on clinical conditions (e.g., hypotension, oliguria).<br><br>**2. Hands-On Practice: IV Access Technique (40 Mins)**<br><br>**Step 1: Demonstration**<br><br>• **Instructor's Role:**<br>  ○ Demonstrate how to prepare IV supplies, including sanitizing hands, selecting a vein, inserting the IV catheter, and securing the line.<br>  ○ Explain potential complications (e.g., infiltration, hematoma) and how to prevent them.<br>  ○ Show how to adjust the drip rate and connect IV fluids.<br><br>**Step 2: Student Practice**<br><br>• Students practice establishing IV access on manikins (or each other with proper supervision) in small groups.<br><br>**3. Fluid Resuscitation Techniques (40 Mins)**<br><br>**Step 1: Demonstration of Fluid Resuscitation**<br><br>• **Instructor's Role:** |

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| | | ○ Explain the importance of selecting the correct fluid and appropriate rate for resuscitation.<br>○ Demonstrate how to adjust the flow rate for fluid resuscitation (e.g., 100 mL/hr for maintenance or bolus infusion for shock patients).<br>○ Show how to monitor the patient's response (e.g., checking vital signs, urine output).<br><br>**Step 2: Student Practice with Fluid Resuscitation**<br><br>• In small groups, students perform fluid resuscitation with varying scenarios presented:<br>○ **Scenario 1:** A patient with hypotension and signs of dehydration (fluid bolus).<br>○ **Scenario 2:** A patient in shock requiring aggressive fluid resuscitation (rate adjustment).<br>○ Students practice adjusting drip rates, setting up IV lines, and monitoring for complications.<br>○ Peer feedback and instructor support will be provided.<br><br>**4. Case Scenarios and Troubleshooting (30 Mins)**<br><br>• Provide students with case-based scenarios to assess their ability to perform IV access and resuscitation independently.<br>• **Scenario Examples:**<br>○ **Case 1:** A patient with mild dehydration (appropriate fluid choice and rate). |

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| | | ○ **Case 2:** A patient with severe shock (aggressive fluid resuscitation, monitoring, rate adjustments).<br>○ **Case 3:** A patient with complications such as extravasation or catheter malfunction (troubleshooting).<br>• **Student Activity:**<br>○ Students will rotate through different stations where they will practice assessing and performing IV access and fluid resuscitation for each case.<br>○ At each station, they will answer questions and make decisions based on the patient's condition.<br>○ After each scenario, instructors will provide feedback and corrections.<br><br>**5. Conclusion and Debriefing (10 Mins)**<br><br>• Summarize the activity, discuss common challenges, and reinforce key concepts.<br>• Review the different patient scenarios and the appropriate fluid resuscitation techniques.<br>• Address any concerns or mistakes encountered during practice.<br>• Provide a brief Q&A session to clarify any doubts regarding IV access or fluid management.<br><br>**Materials Required:** |

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| | | • **IV Access Kits:** IV catheters, sterile gloves, gauze, alcohol swabs, adhesive tape.<br>• **Simulation Equipment:** IV fluid bags (Normal saline, Ringer's lactate), infusion pumps or gravity drip systems.<br>• **Vital Sign Monitors:** Blood pressure cuffs, pulse oximeters, thermometers.<br>• **Case Scenario Handouts:** Different fluid resuscitation scenarios with patient data for group work.<br>• **Clinical Worksheets:** For students to document fluid choice, drip rates, and response to treatment.<br>• **Manikins or Practice Arms:** For IV insertion and fluid administration practice. |
| NLHP9.3 | Monitoring of vital signs and patient status and adjustment of fluid resuscitation in shock | **Activity Plan (2 hours)**<br><br>**1. Introduction to Monitoring and Reassessment (20 Mins)**<br><br>• Familiarize students with the importance of continuous monitoring and reassessment in fluid resuscitation.<br>• Overview of vital signs to monitor during fluid resuscitation:<br>  ○ Blood pressure (BP), heart rate (HR), respiratory rate (RR), oxygen saturation (SpO2), and urine output.<br>• Importance of reassessment intervals and recognizing trends in clinical status.<br>• Guidelines for adjusting fluid rates based on changes in vital signs and clinical response. |

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| | | **2. Simulation Scenarios (80 Mins)**<br><br>**Step 1: Initial Demonstration**<br><br>• Demonstrate a simulated case where a patient is in hypovolemic shock.<br>• Perform real-time monitoring and reassess vital signs every 5-10 minutes.<br>• Show how to adjust the fluid rate based on findings (e.g., increasing fluids for low BP, slowing infusion for pulmonary edema).<br><br>**Step 2: Student Group Simulations**<br><br>• Divide students into small groups (4-5 per group). Each group rotates through multiple stations:<br><br>**Station 1: Initial Assessment and Fluid Resuscitation Start**<br><br>• **Scenario:** A patient presents with low BP, tachycardia, and cold extremities.<br>  ○ Students perform an initial assessment and initiate fluid resuscitation.<br>  ○ Monitor BP and HR after 5 minutes to determine if fluid resuscitation is effective.<br><br>**Station 2: Adjusting Fluids Based on Deterioration** |

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| | | • **Scenario:** The patient develops mild pulmonary edema during resuscitation (e.g., crackles in lungs, rising RR).<br>  ○ Students recognize the signs, reduce the fluid rate, and reassess vital signs after adjustments.<br><br>**Station 3: Monitoring Stabilization and Post-Intervention**<br><br>• **Scenario:** The patient stabilizes after fluid therapy (BP normalizes, HR decreases).<br>  ○ Students perform final reassessments and document the intervention outcome.<br><br>**Peer Feedback and Instructor Observation:**<br><br>• Peers and instructors provide feedback on technique and clinical reasoning.<br><br>**3. Group Debrief and Discussion (20 Mins)**<br><br>• Reflect on simulation experiences and reinforce key learning points.<br>• **Discussion Topics:**<br>  ○ Challenges in monitoring and reassessment.<br>  ○ Recognizing patterns in vital signs and clinical presentation.<br>  ○ Decision-making for adjusting fluid therapy safely and effectively. |

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| | | ○ Q&A session to address doubts and consolidate understanding.<br><br>**Materials Required:**<br><br>1. **Simulation Equipment:**<br>○ High-fidelity manikins or task trainers with adjustable vital signs.<br>○ Simulated IV fluid bags (e.g., saline, Ringer's lactate).<br>○ IV infusion pumps or gravity drip systems.<br>2. **Monitoring Tools:**<br>○ Blood pressure cuffs, pulse oximeters, and respiratory monitors.<br>○ Flowcharts and protocols for fluid resuscitation adjustment.<br>3. **Documentation Tools:**<br>○ Clinical charts for recording vital signs, fluid administration rates, and intervention outcomes. |

**Topic 10 اصلاباتی نگہداشت میں مواصلات، دستاویزات کی تیاری و حوالگی/منتقلی (Communication, Documentation, Referral/Handover in Emergency Care)** (LH : 0, NLHT: 0, NLHP: 3 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
|---|---|---|---|---|---|---|---|---|---|---|
| CO4 | Demonstrate effective communication skills in emergency care settings by engaging empathetically with patients, families, and healthcare team members to foster trust and understanding. | AFT-VAL | MK | SH | RP | SP | F&S | 3 | - | NLHP10.1 |

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| CO4 | Document accurately patient assessments, interventions, and outcomes in emergency care settings using established protocols and legal requirements. | PSY-COR | MK | SH | SIM | DOPS, SBA, DOPS | F&S | 3 | - | NLHP10.2 |
| CO4 | Utilize effective handoff communication techniques to ensure the continuity of care and accurate transfer of information during patient handovers in emergency situations. | PSY-GUD | MK | SH | SIM | SBA, DOPS, DOPS | F&S | 3 | - | NLHP10.3 |

**Non Lecture Hour Theory**

| S.No | Name | Description of Theory Activity |
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**Non Lecture Hour Practical**

| S.No | Name | Description of Practical Activity |
|---|---|---|
| NLHP10.1 | Effective communication skills in emergency care | **Activity Plan (1 hour)**<br><br>**1. Introduction and Overview (10 Minutes)**<br><br>• Explain the importance of communication in emergency care and the role of empathy in building trust with patients, families, and team members.<br>• presents overview of effective communication in emergencies, emphasizing active listening, emotional support, and clear, concise information delivery.<br>• Discuss strategies for empathy, such as validating emotions, offering reassurance, and being present. |

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| | | • Brief discussion on how empathetic communication enhances patient outcomes and team collaboration.<br>• Highlight the role of non-verbal communication (body language, tone of voice, facial expressions).<br>• Video clips showing effective communication skills can also be presented to the students.<br><br>**2. Role-Play Scenarios (40 Minus)**<br><br>• Allow students to practice empathetic communication through role-play in simulated emergency scenarios.<br><br>**Step 1: Scenario Assignment**<br><br>• Divide students into pairs or small groups.<br>• Assign each group a scenario where they will practice communication with patients, families, or healthcare team members. Each scenario will involve a different communication challenge, such as:<br>1. **Patient Communication:** A patient with severe pain needs reassurance and information about their treatment plan.<br>2. **Family Communication:** A family member of a critically ill patient seeks information and emotional support. |

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| | | 3. **Team Communication:** A healthcare team must discuss treatment options and coordinate care under pressure.<br><br>**Step 2: Role-Play Practice**<br><br>• Students in each group act out their assigned scenario, ensuring that they apply effective communication and empathetic listening.<br>• They should demonstrate key techniques:<br>  ○ Active listening<br>  ○ Offering reassurance<br>  ○ Explaining medical procedures in layman's terms<br>  ○ Acknowledging and addressing emotions<br>  ○ Using appropriate non-verbal cues (e.g., eye contact, body language)<br><br>**Step 3: Peer Feedback**<br><br>• After each role-play, peers provide feedback to the performing students on their communication style, effectiveness, and empathy.<br>• Encourage specific comments on how well the communicator demonstrated active listening, empathy, and clarity.<br>• The instructor will also provide feedback, highlighting areas for improvement and reinforcing effective techniques. |

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| | | **3. Group Reflection and Wrap-Up (10 Mins)**<br><br>• Reflect on the role-play exercise to reinforce key takeaways and areas for improvement.<br>• **Group Discussion:**<br>  o What communication techniques worked well?<br>  o How did students feel about engaging empathetically with patients/families?<br>  o What challenges did they face, and how did they overcome them?<br>  o How can these communication skills be applied in real-life emergency situations?<br><br>**Materials Required:**<br><br>1. **Teaching Aids:**<br>  o PowerPoint slides or handouts on communication skills.<br>  o Real-life examples/videos showcasing empathetic communication.<br>2. **Role-Play Materials:**<br>  o Pre-prepared role-play scenarios.<br>  o Medical props (charts, devices) for realism.<br>3. **Feedback Tools:**<br>  o Peer feedback forms.<br>  o Self-assessment checklists for students. |

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| NLHP10.2 | Accurate documentation in emergency care | **Activity Plan (1 hour)**<br><br>**1. Introduction and Overview (10 Mins)**<br><br>• Introduce the importance of accurate and legally compliant documentation in emergency care.<br>• Highlight the role of documentation in patient safety, continuity of care, legal protection, and quality assurance.<br>• Overview of established protocols and legal requirements, including key elements such as:<br>  ○ Patient demographics<br>  ○ Chief complaints and assessments<br>  ○ Interventions performed<br>  ○ Outcomes and follow-up actions<br>  ○ Examples of poor vs. accurate documentation.<br><br>**2. Documentation Practice with Simulated Case Scenarios (40 Mins)**<br><br>**Step 1: Case Scenario Introduction**<br><br>• Divide the class into small groups or pairs.<br>• Provide each group with a simulated patient scenario that includes:<br>  ○ Patient history, vital signs, and clinical presentation.<br>  ○ Details of interventions performed and patient outcomes.<br>• **Example Scenarios:** |

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| | | • Case 1: A 45-year-old male presenting with chest pain and shortness of breath.<br>• Case 2: A 7-year-old child with a high-grade fever and suspected dehydration.<br>• Case 3: A 70-year-old female found unconscious at home, suspected stroke.<br><br>**Step 2: Documentation Task**<br><br>• Students will use the provided templates to document:<br>  ○ Patient assessments (e.g., history, vital signs, physical exam findings).<br>  ○ Interventions performed (e.g., oxygen therapy, IV fluids).<br>  ○ Outcomes and recommendations for next steps.<br><br>**Step 3: Peer Review and Feedback**<br><br>• Groups exchange their completed documentation with another group.<br>• Review the documentation for accuracy, clarity, completeness, and adherence to protocols.<br>• Instructor provides overall feedback and highlights common errors and best practices.<br><br>**3. Debrief and Reflection (10 Mins)**<br><br>• Reflect on the activity to reinforce learning. |

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| | | • **Discussion Points:**<br>  ○ Challenges encountered in documenting accurately under time constraints.<br>  ○ Importance of legal compliance in emergency documentation.<br>  ○ How accurate documentation improves patient outcomes and team communication.<br><br>**Materials Required:**<br><br>• **Teaching Aids:**<br>  ○ Presentation slides or handouts explaining documentation protocols.<br>  ○ Pre-prepared simulated patient cases.<br>• **Documentation Tools:**<br>  ○ Templates or sample forms for practice.<br>• **Feedback Tools:**<br>  ○ Peer review guidelines and self-assessment checklists. |
| NLHP10.3 | Effective handoff communication techniques in emergency situations | **Activity Plan (1 hour)**<br><br>**1. Introduction and Overview (10 Mins)**<br><br>• Introduce the significance of handoff communication in emergency situations. |

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| | | • Importance of structured communication during patient handovers.<br>• Overview of standardized tools for handoffs, such as SBAR (Situation, Background, Assessment, Recommendation) or IPASS (Illness severity, Patient summary, Action list, Situation awareness, Synthesis by receiver).<br>• **Teaching Method:**<br>  ○ Brief lecture with examples of good and poor handoff communication.<br>  ○ Provide students with handoff templates (SBAR or IPASS).<br><br>**2. Simulation Scenarios (40 Mins)**<br><br>**Step 1: Demonstration**<br><br>• Demonstrate a complete and structured handoff using SBAR/IPASS for a simulated patient case (e.g., a trauma patient in hypovolemic shock).<br>• Highlight key points such as clarity, prioritization of information, and confirmation of understanding by the receiver.<br><br>**Step 2: Student Role Play**<br><br>• Divide students into pairs or small groups.<br>• Each group works on the same case scenario or different ones provided by the instructor. |

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| | | **Roles:**<br><br>1. **Sender:** Communicates patient information to the receiver using a structured format.<br>2. **Receiver:** Actively listens, asks clarifying questions, and summarizes the information to confirm understanding.<br><br>**Scenarios:**<br><br>• Case 1: Patient with acute myocardial infarction being handed over to the ICU team.<br>• Case 2: Trauma patient stabilized in the emergency department and transferred to surgery.<br>• Case 3: Pediatric patient with severe dehydration handed over to the inpatient team.<br><br>**Peer Feedback and Instructor Guidance:**<br><br>• Observers and the instructor provide constructive feedback on clarity, completeness, and accuracy of the handoff.<br><br>**3. Debrief and Reflection (10 Mins)**<br><br>• Reflect on the activity and reinforce best practices.<br>• **Discussion Points:**<br>  ○ Challenges faced during the handoff process.<br>  ○ Importance of confirming information during handoffs. |

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| | | ○ Key takeaways to improve communication skills in clinical practice.<br><br>**Summary of Materials Needed:**<br><br>1. **Teaching Aids:**<br>○ Presentation slides or handouts on handoff frameworks (SBAR/IPASS).<br>○ Pre-written patient case scenarios for simulation.<br>2. **Documentation Tools:**<br>○ Handoff templates for practicing structured communication.<br>3. **Simulation Equipment (Optional):**<br>○ Manikins or monitors for visualizing patient vitals during handoff scenarios. |

**Topic 11 Miscellaneous Topics** (LH : 0, NLHT: 0, NLHP: 3 hours)

| A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 |
|---|---|---|---|---|---|---|---|---|---|---|
| CO4 | Perform a step-by-step assessment of the type and severity of poisoning, demonstrating appropriate decontamination techniques and administration of antidotes or supportive care in a simulated emergency. | PSY-GUD | MK | SH | SIM, D | PA, SBA, OSCE | F&S | 3 | - | NLHP11.1 |
| CO4 | Measure accurately the depth and extent of burns or scalds using the Rule of Nines and apply first aid and stabilization techniques, including proper fluid resuscitation and wound care, in a simulated scenario | PSY-MEC | MK | SH | SIM, RP | DOPS, DOPS, SBA, DOAP | F&S | 3 | - | NLHP11.2 |

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| CO4 | Demonstate ability to extract foreign bodies from the airway, ear, eye, or skin safely and effectively using appropriate tools and techniques, demonstrating precision and adherence to safety protocols in a clinical simulation. | PSY-COR | MK | SH | SIM, RP, L_VC | DOPS, P-VIVA, CHK, DOPS | F&S | 3 | - | NLHP11.3 |
| **Non Lecture Hour Theory** | | | | | | | | | | |
| **S.No** | **Name** | | | | **Description of Theory Activity** | | | | | |
| **Non Lecture Hour Practical** | | | | | | | | | | |
| **S.No** | **Name** | | | | **Description of Practical Activity** | | | | | |
| NLHP11.1 | Assessment and management of Posioning | | | | **Activity Plan (1 hour)**<br><br>**1. Introduction (10 mins)**<br><br>• Brief students on the purpose of the session and the practical steps involved in assessing and managing poisoning cases.<br>• I The instructor will demonstrate the following:<br>o Initial assessment of airway, breathing, circulation (ABC).<br>o Identifying key symptoms and signs based on poison type (e.g., organophosphates, corrosives, or carbon monoxide).<br>o Use of decontamination techniques (e.g., gastric lavage, activated charcoal).<br>o Administration of antidotes and supportive care. | | | | | |

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| | | **2. Hands-On Practice (40 mins)**<br><br>• Divide students into small groups (3–4 students each).<br>• Assign each group a simulated poisoning case (e.g., insecticide poisoning, corrosive ingestion, drug overdose).<br>• Groups will:<br>1. Perform initial assessment using the ABC approach.<br>2. Identify symptoms and classify the severity of poisoning.<br>3. Demonstrate appropriate decontamination procedures.<br>4. Administer simulated antidotes based on the case.<br>5. Plan and explain supportive care interventions.<br>• Rotate scenarios after 20 minutes to ensure exposure to multiple poisoning types.<br><br>**3. Debrief and Feedback (10 mins)**<br><br>• Groups will present their approach to each case.<br>• Instructor provides feedback on performance, including clinical reasoning and technical skills.<br>• Discuss common errors and highlight best practices.<br><br>**Materials Required:** Simulation mannequin, antidote kit, activated charcoal, personal protective equipment (PPE), decontamination supplies, and patient case scenarios. |

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| NLHP11.2 | Burns and Scalds Assessment and Stabilization in Simulated Scenarios | **Activity Plan (1 hour)**:<br><br>**1. Introduction and Instructions (10 Mins)**:<br><br>• Brief discussion on the Rule of Nines and its application for estimating burn severity.<br>• Overview of first aid techniques for burns and scalds, including fluid resuscitation principles and wound care.<br><br>**2. Simulation and Role-Playing (40 Mins)**:<br><br>• Divide students into small groups.<br>• Present realistic burn cases (e.g., thermal burns, scalds) on simulated patients or mannequins.<br>• Students will:<br>  ○ Measure the depth and extent of burns using the Rule of Nines chart.<br>  ○ Demonstrate first aid for burns, including applying clean dressings.<br>  ○ Perform fluid resuscitation calculations based on case specifics and simulate IV setup.<br><br>**3. Debrief and Feedback (10 Mins)**:<br><br>• Instructors provide constructive feedback on technique, accuracy of assessment, and overall management. |

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| | | • Discuss critical points and correct any errors observed during the activity.<br><br>**Materials Required**:<br><br>• Simulated burn injury mannequins or burn wound images.<br>• Rule of Nines charts.<br>• Dressing kits (sterile gauze, bandages).<br>• Fluid resuscitation equipment (IV cannulas, normal saline or Ringer's lactate, syringes).<br>• Assessment checklists. |
| NLHP11.3 | Simulated Practice in Foreign Body Removal | **Activity Plan (1 hour)**<br><br>**1. Introduction and Demonstration (15 Mins)**:<br><br>• Brief overview of foreign body removal techniques for different anatomical locations (airway, ear, eye, skin).<br>• Instructor demonstration of tools and techniques using mannequins and models, emphasizing safety protocols and precision. Video demonstration can also be used.<br><br>**2. Guided Practice in Small Groups (40 Mins)**:<br><br>• Students will rotate through stations, each focused on one location:<br>  ○ **Airway**: Removal of foreign bodies using Magill forceps or suction. |

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| | | ○ **Ear**: Removal using an otoscope and forceps or irrigation.<br>○ **Eye**: Removal using saline irrigation or a moistened cotton applicator.<br>○ **Skin**: Removal of splinters or embedded objects using tweezers or sterile needles.<br>• Students practice techniques under instructor supervision, ensuring adherence to safety protocols.<br><br>**3. Debrief and Feedback (5 Mins)**:<br><br>• Instructor reviews common errors and best practices observed during the activity.<br>• Group discussion on safety precautions and decision-making during foreign body removal.<br><br>**Materials Required**:<br><br>• Anatomical mannequins/models (airway, ear, eye, skin).<br>• Simulated foreign bodies (e.g., beads, small objects, splinters).<br>• Tools: Magill forceps, tweezers, otoscopes, irrigation syringes, saline solution, cotton applicators, sterile needles.<br>• Disposable gloves, sterile dressings.<br>• Checklist for skill assessment. |

**Table 4 : NLHT Activity**

Not Applicable

**Table 5 : List of Practicals**

(*Refer table 3 of similar activity number)

| Sr No | CO No | Practical Activity details |
|---|---|---|
| 1.1 | CO4 | Assessment and Triage in Emergency Situations |
| 1.2 | CO4 | Assessment and decision-making in life-threatening conditions. |
| 1.3 | CO4 | Components of an Emergency Department (ED) |
| 2.1 | CO4 | Basic Life Support (BLS) techniques |
| 2.2 | CO4 | BLS for special populations |
| 3.1 | CO4 | Resuscitation for patients with fluid loss and haemorrhage. |
| 3.2 | CO4 | Assessment of severity of bleeding/hemorrhage |
| 3.3 | CO4 | Effective techniques for bleeding control |
| 4.1 | CO4 | ABC Stabilization and Coordination in Emergency Situations |
| 4.2 | CO4 | Assessment of altered mental status. |
| 4.3 | CO4 | Neurological examination in a patient with altered mental status |
| 5.1 | CO4 | Medication Selection in Simulated Emergency Scenarios |
| 5.2 | CO4 | Safe administration of emergency medications |
| 5.3 | CO4 | Identifying and Managing Adverse Reactions to Emergency Medications |
| 6.1 | CO4 | Assessment of acute pain. |
| 6.2 | CO4 | Pain management in emergency conditions. |
| 7.1 | CO4 | Managemet of acute pain by Unani therapeutic approaches. |
| 7.2 | CO4 | Management of acute GI distress by Unani therapeutic approaches. |
| 7.3 | CO4 | Wound care and dressing in emergency situations using Unani topical preparations. |
| 7.4 | CO4 | Use of Unani therapeutic approaches in acute respiratory symptoms. |
| 7.5 | CO4 | Mangement of shock using Unani regimens/medicines. |
| 7.6 | CO4 | Management of seizure by Unani therapeutic approaches |
| 7.7 | CO4 | Important emergency regeminal techniques |
| 8.1 | CO4 | Assessment of respiratory distress in patients |

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| 8.2 | CO4 | Initial interventions in respiratory distress |
| 8.3 | CO4 | Indications for referral in severe respiratory distress or failure |
| 9.1 | CO4 | Assessment of shock indicators |
| 9.2 | CO4 | Establisment of intravenous (IV) access and initiation of fluid resuscitation techniques |
| 9.3 | CO4 | Monitoring of vital signs and patient status and adjustment of fluid resuscitation in shock |
| 10.1 | CO4 | Effective communication skills in emergency care |
| 10.2 | CO4 | Accurate documentation in emergency care |
| 10.3 | CO4 | Effective handoff communication techniques in emergency situations |
| 11.1 | CO4 | Assessment and management of Posioning |
| 11.2 | CO4 | Burns and Scalds Assessment and Stabilization in Simulated Scenarios |
| 11.3 | CO4 | Simulated Practice in Foreign Body Removal |

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

| Subject Code | Papers | Theory | Practical/Clinical Assessment (-) | | | | | Grand Total |
|---|---|---|---|---|---|---|---|---|
| | | | Practical | Viva | Elective | IA | Sub Total | |
| UNIUG-EM | 1 | - | - | - | - | - | - | - |

6 B : Scheme of Assessment (formative and Summative)

Not Applicable

6 C : Calculation Method for Internal assessment Marks

Not Applicable

6 D : Evaluation Methods for Periodical Assessment

Not Applicable

6 E : Question Paper Pattern

Not Applicable

6 F : Distribution of theory examination

Not applicable

6 G : Instructions for UG Paper Setting & Blue print

Not Applicable

6 H : Distribution of Practical Exam

Not Applicable

References Books/ Resources

| S.No | Resources |
|---|---|
| 1 | Arzani MA. Ṭibb-i-Akbar, 7th ed. Kanpur, Matba Nami Munshi Naval Kishor; 1905. |
| 2 | Baghdadi M. Kitāb al-Mukhtārātfi'lṬibb, Hyderabad India, Dairatu'l Maarif; 1362 AH. |
| 3 | Ghani N. Khazā'in al-Adwiya; New Delhi, Central Council for Research in Unani Medicine; 2010. |
| 4 | Gruner O C. A Treatise on the Canon of Medicine of Avicenna. New York, AMS Press; 1973. |
| 5 | Ibn Rushd. Kitāb al-Kulliyāt (Urdu translation). New Delhi, Central Council for Research in Unani Medicine; 1980. |
| 6 | Ibn Sina. *Al Qanoon* (Urdu translation). New Delhi: Idara Kitab ul Shifa; 2021. |
| 7 | Khan M. Al-Iksīr,. New Delhi: Ejaz Publishing House; 2003. |
| 8 | Kirmani N. Sharḥ al-Asbābwa'l 'Alāmāt. Lucknow, Matba Munshi Naval Kishor; 1326 AH. |
| 9 | Majusi A. Kāmil al-Ṣanā'a al-Ṭibbiyya. New Delhi, Central Council for Research in Unani Medicine; 2005. |
| 10 | National AYUSH morbidity and standardized terminologies electronic portal. Delhi: Ministry of AYUSH. (http://www.namstp.ayush.gov.in) |
| 11 | Qamari H. Ghinā Munā. New Delhi, Central Council for Research in Unani Medicine; 2008. |
| 12 | Khan A. Haziq. New Delhi: Idara Kitabul Shifa; 2002: |
| 13 | Razi M. Al-Manṣūrīfi'lṬibb, Kuwait. Al-Munazzamatu'l Islamia li't Tarbiyawa'l Uloom wa'lSaqafa; 1987. |
| 14 | Standard Unani medical terminology. New Delhi: Central Council for Research in Unani Medicine; 2013 (https://ccrum.res.in/ writereaddata/UploadFile/Standard%20Unani%20Medical%20 Terminology_1430.pdf). |
| 15 | Tabari A. Firdaws al-Ḥikmafi'lṬibb. Karachi, Hamdard Foundation Press; 1981. |
| 16 | Tabari AA. Al-Mu'ālajāt al-Buqrāṭiya (Urdu translation). New Delhi, Central Council for Research in Unani Medicine; 1995. |
| 17 | Ralston, S., Penman, I., Strachan, M. and Hobson, R. Davidson's Principles and Practice of Medicine. 23rd ed. London: Elsevier; 2018. |
| 18 | Mathew G, Aggarwal P. Medicine: prep manual for undergraduates. 7th ed. New Delhi: Elsevier; 2023. |
| 19 | Hutchison J, editor. Hutchison's clinical methods: an integrated approach to clinical practice. 24th ed. New Delhi: Elsevier; 2017. |
| 20 | Golwalla AF, Golwalla SA, Nadkar MY. Golwalla's medicine for students. 25th ed. New Delhi: Jaypee Brothers Medical Publishers; 2017. |

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|---|---|
| 21 | Goldman L, Schafer AI: Goldman's Cecil Medicine. Philadelphia, Elsevier Saunders, 24th Edition. 2012. |
| 22 | Kumar P, Clark M: Clinical Medicine. London, Elsevier, 6th Edition. 2009. |
| 23 | Longo DL, Kasper DL, Jameson JL, Fauci AS, Hauser SL, Loscalzo J. Harrison's principles of Internal Medicine. 18th ed. New York: McGraw-Hill Companies; 2012. |
| 24 | Beauchamp TL, Childress JF. Principles of Biomedical Ethics. 7th ed. New York: Oxford University Press; 2013. |
| 25 | Raghavan S. Medical Ethics: A Comprehensive Guide. 1st ed. New Delhi: Jaypee Brothers Medical Publishers; 2015. |
| 26 | Murphy SJ, Werring DJ. Stroke: causes and clinical features. Medicine (Abingdon). 2020 Sep;48(9):561-566. doi: 10.1016/j.mpmed.2020.06.002. Epub 2020 Aug 6. PMID: 32837228; PMCID: PMC7409792. |
| 27 | Schuster DP, Duvuuri V. Diabetes mellitus. Clin Podiatr Med Surg. 2002 Jan;19(1):79-107. doi: 10.1016/S0891-8422(03)00082-X. PMID: 11806167. |
| 28 | Webster AC, Nagler EV, Morton RL, Masson P. Chronic Kidney Disease. Lancet. 2017 Mar 25;389(10075):1238-1252. doi: 10.1016/S0140-6736(16)32064-5. Epub 2016 Nov 23. PMID: 27887750. |
| 29 | Shahjehan RD, Bhutta BS. Coronary Artery Disease. 2023 Aug 17. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan–. PMID: 33231974. |
| 30 | Olasveengen TM, Semeraro F, Ristagno G, Castren M, Handley A, Kuzovlev A, Monsieurs KG, Raffay V, Smyth M, Soar J, Svavarsdóttir H, Perkins GD. Basismaßnahmen zur Wiederbelebung Erwachsener (Basic Life Support): Leitlinien des European Resuscitation Council 2021 [Basic life support]. Notf Rett Med. 2021;24(4):386-405. German. doi: 10.1007/s10049-021-00885-x. Epub 2021 Jun 2. PMID: 34093079; PMCID: PMC8170637. |
| 31 | Ranjan R, Narayan S. Bioethics: A Global Perspective. New Delhi: Oxford University Press; 2018. |
| 32 | Chugh SN. Emergency medicine for students and practitioners. 5th ed. New Delhi: CBS; 2019. |
| 33 | Weingart SD, Brown SP. The critical care manual: a guide to the management of critically ill patients. 2nd ed. New York: McGraw-Hill; 2020. |
| 34 | O'Connor RE, Alagappan K, Lemaire J, et al. Emergency medical services: principles and practice. 4th ed. Burlington: Jones & Bartlett Learning; 2021. |

**Abbreviations**

| Domain | | T L Method | | Level | | Assessment | | Integration | |
|---|---|---|---|---|---|---|---|---|---|
| CK | Cognitive/Knowledge | L | Lecture | K | Know | T-CS | Theory case study | V-UAMF | V-UAMF |
| CC | Cognitive/Comprehension | L&PPT | Lecture with PowerPoint presentation | KH | Knows how | T-OBT | Theory open book test | V-KUT | V-KUT |
| CAP | Cognitive/Application | L&GD | Lecture & Group Discussion | SH | Shows how | P-VIVA | Practical Viva | V-TB | V-TB |
| CAN | Cognitive/Analysis | L_VC | Lecture with Video clips | D | Does | P-REC | Practical Recitation | V-MZ | V-MZ |
| CS | Cognitive/Synthesis | REC | Recitation | | | P-EXAM | Practical exam | V-TT | V-TT |
| CE | Cognitive/Evaluation | SY | Symposium | | | PRN | Presentation | V-IA | V-IA |
| PSY-SET | Psychomotor/Set | TUT | Tutorial | | | P-PRF | Practical Performance | V-ISM | V-ISM |
| PSY-GUD | Psychomotor/Guided response | DIS | Discussions | | | P-SUR | Practical Survey | V-TST | V-TST |
| PSY-MEC | Psychomotor/Mechanism | BS | Brainstorming | | | P-EN | Practical enact | V-MA | V-MA |
| PSY-ADT | Psychomotor Adaptation | IBL | Inquiry-Based Learning | | | P-RP | Practical Role play | V-TQS | V-TQS |
| PSY-ORG | Psychomotor/Origination | PBL | Problem-Based Learning | | | P-MOD | Practical Model | V-SUI | V-SUI |

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|---|---|---|---|---|---|---|---|---|---|
| AFT-REC | Affective/ Receiving | CBL | Case-Based Learning | | | P-POS | Practical Poster | H-MOA | H-MOA |
| AFT-RES | Affective/Responding | PrBL | Project-Based Learning | | | P-CASE | Practical Case taking | H-QAN | H-QAN |
| AFT-VAL | Affective/Valuing | TBL | Team-Based Learning | | | P-ID | Practical identification | H-IJ | H-IJ |
| AFT-SET | Affective/Organization | TPW | Team Project Work | | | P-PS | Practical Problem solving | H-AUH | H-AUH |
| AFT-CHR | Affective/ characterization | FC | Flipped Classroom | | | QZ | Quiz | H-AJT | H-AJT |
| PSY-PER | Psychomotor/perception | BL | Blended Learning | | | PUZ | Puzzles | H-IBT | H-IBT |
| PSY-COR | Psychomotor/ Complex Overt Response | EDU | Edutainment | | | CL-PR | Class Presentation | H-AAN | H-AAN |
| | | ML | Mobile Learning | | | DEB | Debate | H-RMS | H-RMS |
| | | ECE | Early Clinical Exposure | | | WP | Word puzzle | | |
| | | SIM | Simulation | | | O-QZ | Online quiz | | |
| | | RP | Role Plays | | | O-GAME | Online game-based assessment | | |
| | | SDL | Self-directed learning | | | M-MOD | Making of Model | | |
| | | PSM | Problem-Solving Method | | | M-CHT | Making of Charts | | |
| | | KL | Kinaesthetic Learning | | | M-POS | Making of Posters | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | W | Workshops | | | C-INT | Conducting interview | | |
| | | GBL | Game-Based Learning | | | INT | Interactions | | |
| | | LS | Library Session | | | CR-RED | Critical reading papers | | |
| | | PL | Peer Learning | | | CR-W | Creativity Writing | | |
| | | RLE | Real-Life Experience | | | C-VC | Clinical video cases | | |
| | | PER | Presentations | | | SP | Simulated patients | | |
| | | D-M | Demonstration on Model | | | PM | Patient management problems | | |
| | | PT | Practical | | | CHK | Checklists | | |
| | | X-Ray | X-ray Identification | | | Mini-CEX | Mini-CEX | | |
| | | CD | Case Diagnosis | | | DOPS | DOPS | | |
| | | LRI | Lab Report Interpretation | | | CWS | CWS | | |
| | | DA | Drug Analysis | | | RS | Rating scales | | |
| | | D | Demonstration | | | RK | Record keeping | | |
| | | D-BED | Demonstration Bedside | | | COM | Compilations | | |
| | | DL | Demonstration Lab | | | Portfolios | Portfolios | | |
| | | DG | Demonstration Garden | | | Log book | Log book | | |

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|---|---|---|---|---|---|---|---|---|---|
| | | FV | Field Visit | | | TR | Trainers report | | |
| | | | | | | SA | Self-assessment | | |
| | | | | | | PA | Peer assessment | | |
| | | | | | | 360D | 360-degree evaluation | | |
| | | | | | | PP-Practical | Practical | | |
| | | | | | | VV-Viva | Viva | | |
| | | | | | | DOAP | Demonstration Observation Assistance Performance | | |
| | | | | | | SBA | Scenario Based Assessment | | |
| | | | | | | CBA | Case based Assessment | | |
| | | | | | | S-LAQ | Structured LAQ | | |
| | | | | | | OSCE | Objective Structured Clinical Examination | | |
| | | | | | | OSPE | Objective Structured Practical Examination | | |
| | | | | | | DOPS | Direct observation of | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | procedural skills | | |