

COURSE CURRICULUM FOR THIRD PROFESSIONAL B.U.M.S.
(PRESCRIBED BY NCISM)

MOALAJAT (Medicine)

(SUBJECT CODE : UNIUG-MOA)

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



॥ आयुषे सर्वलोकानाम् ॥

BOARD OF UNANI, SIDDHA AND SOWA-RIGPA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026



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

Subject Code : UNIUG-MOA

Moalajat
(Medicine)

Summary

Total number of Teaching hours: 480			
Lecture (LH) - Theory		160	160(LH)
Paper I	50		
Paper II	50		
Paper III	60		
Non-Lecture (NLHT)		100	320(NLH)
Paper I	35		
Paper II	35		
Paper III	30		
Non-Lecture (NLHP)		220	
Paper I	74		
Paper II	73		
Paper III	73		

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	100	30	-	20
Paper II	100				
Paper III	100				
Sub-Total	300	150			
Total marks	450				

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. A portion 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-MOA	Moalajat

Table 1 : Course learning outcomes and mapped PO

SR1	A1	B1
CO No	Course learning Outcomes (CO) UNIUG-MOA At the end of the course UNIUG-MOA, the students should be able to	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 (Moalajat (Medicine) Paper I)						
Sr.No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 NonLecture hours Theory	F2 NonLecture hours Practica I
1	<p>1 امراض نفساني Amrāḍ-i-Nafsānī (Psychiatric Disorders)</p> <p>This topic covers the classification, diagnosis, and treatment of psychiatric disorders by integrating modern medical approaches such as the DSM-5. Students will learn to conduct mental status examinations, recognize psychiatric symptoms, and develop holistic treatment plans that combine 'Ilāj bi'l Dawā (pharmacotherapy), 'Ilāj bi'l Taghdhiya (dietary therapy) and 'Ilāj bi'l Tadbīr (regimen therapy). The practical component will include guided training in performing mental status examinations, evaluating case studies to identify psychiatric symptoms that address both the psychological and physiological aspects of mental health. The following sub-topics will be studied:</p> <p>1.1 عمومي تعارف Umūmī Ta'ruf (General Introduction)</p> <p>1.2 اضطرابات القلق Idṭarābāt al-Qalaq (Anxiety Disorders)</p> <p>1.3 اضطرابات الاكتئاب Idṭarābāt al-Akt'ābī (Depressive Disorders)</p> <p>1.4 التحويليا Mālankhūliyā (Melancholia)</p> <p>1.5 سهر Sahar (Insomnia)</p>	1	24	6	3	6

	1.6 اضطرابات المرتبطة بالمواد والادمان Idṭarābāt al-Murtaḅṭa wa' l-Idmān (Substance-Related and Addictive Disorders)				
2	<p>2 امراض غدد لانتاني Amrāḍ-ī-Ghudud lā Qanātī (Endocrine Disorders)</p> <p>This topic covers the classification, pathophysiology, clinical manifestations, diagnostic approaches, and treatment strategies for various endocrine disorders. Students will explore the role of the endocrine system in maintaining homeostasis and its interconnectedness with other bodily systems. Practical sessions will involve case studies, interpretations of hormone level assessments, emphasizing the impact of endocrine disorders on overall health and well-being. The following sub-topics will be covered:</p> <p>2.1 امراض غدد نخامية Amrāḍ-ī-Ghudud-ī-Nukhāmiyya (Pituitary Disorders)</p> <p>2.2 امراض غدد درقيه Amrāḍ-ī-Ghudud-ī-Daraqiyya (Thyroid Disorders)</p> <p>2.3 امراض غدد فوق الكليه Amrāḍ-ī-Ghudud-ī-Fūq al-Kulya (Adrenal Disorders)</p>	1	4	1	4
3	<p>3 امراض نقص استتاله Amrāḍ-ī-Naqṣ-ī-Istihāla (Metabolic Disorders)</p> <p>This topic will cover metabolic disorders appropriate for undergraduate learning. Students will learn about the underlying pathophysiology, clinical manifestations, diagnostic approaches, and management strategies for these disorders, emphasizing the integration of dietary and lifestyle</p>	1	4	5	12

	<p>modifications in treatment plans. The following sub-topics will be covered:</p> <p>3.1 ذیابیطس السكری Dhayābītus al-Sakrī (Diabetes Mellitus)</p> <p>3.2 امراض نقص استقلاب شحم Amrād-i- Nuqṣ-i-Istihāla-i-Shaḥm (Lipid Metabolism Disorders)</p> <p>3.3 سمن مفرط Siman Mufriṭ (Obesity)</p>					
4	<p>4 امراض توراث Amrād-i-Tūrāth (Genetic Disorders)</p> <p>This topic provides undergraduate students with a general introduction to genetic disorders, covering fundamental concepts such as the types of genetic mutations, modes of inheritance, and brief about common genetic disorders. Students will gain an understanding of how genetic abnormalities can lead to various diseases and conditions. Basic principles of diagnosis and the role of genetics in health and disease will also be introduced, laying the groundwork for further study in genetics and medical applications</p>	1	6	1	1	0
5	<p>5 Nervous System Part 1: صداع Şudā' (Headache)</p> <p>This topic covers the nomenclatures, definitions, classification, diagnosis, principles of management and management of various types of headaches mentioned in Unani Medicine. Students will learn to differentiate primary headaches from secondary headaches, identify triggers, and develop effective treatment plans incorporating both pharmacological and non-pharmacological approaches.</p>	2	11	1	1	2
6	<p>6 Nervous System Part 2: عدوی الجهاز العصبي المركزي Adwī al-Jahāz al-'Aṣḅī al-Markazī (Infections of the Central</p>	2	23	2	1	2

	<p>Nervous System: Focus on Meningitis and Encephalitis)</p> <p>This topic focuses on the infections of the central nervous system, specifically meningitis and encephalitis. It encompasses both modern medical approaches and Unani medicine perspectives in understanding these conditions. Students will explore the etiology, pathophysiology, clinical presentation, diagnostic criteria, and management strategies for meningitis and encephalitis. Emphasis will be placed on differentiating between viral and bacterial causes, recognizing warning signs, and understanding the complications associated with these infections. The following two diseases will be covered:</p> <p>6.1 سرسام Sarsām (Meningitis)</p> <p>6.2 ورم دماغ Waram-i-Dimāgh (Encephalitis)</p>					
7	<p>7 Nervous System Part 3: اضطرابات العصبية العضلية: ḍṭarābāt al-‘Aṣḃīyya ‘Aḏliyya (Neuromuscular Disorders)</p> <p>This topic focuses on neuromuscular disorders, specifically examining conditions such as paralysis, facial palsy, muscle spasms, and flaccidity. Students will explore the underlying mechanisms, clinical features, and diagnostic approaches for these disorders. The course will also cover the etiology and pathophysiology of each condition, enabling students to understand their impact on muscle function and mobility. Emphasis will be placed on identifying the appropriate management strategies and treatment options, as well as recognizing when to refer patients to specialists for further evaluation and care. Through a combination of theoretical knowledge and practical</p>	2		4	0	4

	<p>applications, students will gain a comprehensive understanding of these critical neuromuscular conditions. The following diseases will be covered:</p> <p>7.1 فالج Fālij (Paralysis)</p> <p>7.2 لقوه Laqwa (Facial palsy)</p> <p>7.3 استرخاء Istirkhā' (Flaccidity/Hypotonia)</p> <p>7.4 تشنج Tashannuj (Muscle Spasms)</p>					
8	<p>8 Nervous System Part 4: اضطرابات أوعية الدماغية: Iḍṭarābāt Aw'iyā al-Damawiyya al-Dimāghiyya (Cerebrovascular Disorders)</p> <p>Cerebrovascular disorders encompass a range of conditions that affect the blood vessels and circulation to the brain, leading to varying degrees of neurological impairment. These disorders primarily include strokes, and transient ischemic attacks (TIAs). This topic covers the pathophysiology, risk factors, clinical presentation, diagnostic approaches, and management strategies for these conditions. Students will learn to assess and manage cerebrovascular emergencies, focusing on early intervention, preventive care, and rehabilitation for improving patient outcomes. The following two diseases will be covered:</p> <p>8.1 سكتة Sakta (Stroke)</p> <p>8.2 دوّار Duwār (Vertigo)</p>	2		2	1	6
9	<p>9 Nervous System Part 5: حالات الوعي المتغيرة: Hālāt al-Wa'iyya al-Mutaghiyyra (Altered state of Consciousness)</p>	2		1	2	4

	<p>Altered states of consciousness (ASCs) encompass significant changes in awareness and perception, including conditions like coma and vegetative states resulting from severe brain injury. Understanding ASCs is vital for healthcare professionals in diagnosis and treatment planning. This topic will explore the characteristics, causes, and implications of these critical conditions. Theoretical and practical aspects of سبات وكوما Subāt (Prolonged state of deep sleep) and Kawmā (Coma) will be covered under this topic.</p>					
10	<p>10 Nervous System Part 6: اضطرابات المعرفة: Idṭarābāt al-Ma'riyya (Cognitive Disorders)</p> <p>Cognitive disorders are conditions that impair cognitive functions such as memory, reasoning, and problem-solving, significantly affecting daily life and functioning. This topic covers key disorders appropriate for UG level, focusing on their classification, etiology, clinical presentations, and underlying neurobiological mechanisms. Students will learn to utilize diagnostic criteria and assessment tools, as well as develop management strategies and therapeutic interventions. Emphasizing the role of caregiver support, this topic prepares students to effectively identify and manage cognitive disorders in clinical practice. The following diseases will be covered:</p> <p>10.1 نسيان Nisyān (Amnesia)</p> <p>10.2 مرض الزهايمر Marḍ-i-Alzahāymar (Alzheimer's Disease)</p>	2		3	1	0

11	<p>11 Nervous System Part 7: اضطرابات الصرع والحركة: Idṭarābāt al-Ṣar' wa Ḥaraka (Epileptic and Movement Disorders)</p> <p>This topic covers This topic covers the diagnosis, pathophysiology, and management of key neurological disorders, . The content emphasizes understanding the clinical features, etiologies, and modern as well as Unani perspectives on these movement disorders. Students will learn comprehensive approaches to diagnosis, treatment strategies, and long-term care for patients with these conditions. The following diseases will be covered:</p> <p>11.1 صرع Ṣar' (Epilepsy)</p> <p>11.2 داء الرقص Dā' al-Raqṣ (Chorea)</p> <p>11.3 رعشة Ra'sha (Tremors)</p> <p>11.4 مرض باركنسون Marḍ-i-Bārkinsan (Parkinson's Disease)</p>	2		5	4	6
12	<p>12 Nervous System Part 8: اضطرابات الجهاز العصبي اللاإرادي: Idṭarābāt al-Jahāz al-'Aṣbī -al Airādī (Autonomic Nervous System Disorders)</p> <p>This topic covers Autonomic Nervous System (ANS) Disorders, which involve conditions affecting the body's involuntary functions, such as heart rate, blood pressure, digestion, and temperature regulation. Students will be given general introduction of such diseases. Specifically, this topic will address orthostatic hypotension and students will learn its pathophysiology, clinical presentation, potential causes and management strategies. Emphasis will be</p>	2	6	1	1	4

	placed on recognizing risk factors, conducting proper assessments, and implementing effective treatment plans to enhance patient care and outcomes.					
13	<p>13 Nervous System Part 9: اضطرابات الجهاز العصبي المحيطي Iḍṭarābāt al-Jahāz al-'Aṣbī -al Muḥṭī (Peripheral Nervous System Disorders)</p> <p>This topic focuses on Peripheral Nervous System (PNS) disorders, general introduction about various types of PNS disorders, including their classification, and common causes. Within this framework, the course will delve into neuritis, discussing its etiology, clinical features such as pain, weakness, and sensory disturbances, and diagnostic approaches. Emphasis will also be placed on management strategies for neuritis to enhance patient care.</p>	2		1	2	2
14	<p>14 Nervous System Part 10: ضعف دماغ Ḍu'f-i-Dimāgh (Cerebral Asthenia)</p> <p>This topic covers types, causes, clinical features of both Ḍu'f-i-Dimāgh Umūmī (general weakness of the brain) and Ḍu'f-i-Dimāgh Juz'ī (local weakness of the brain). It highlights key therapeutic practices, including Ilāj bi'l-Ghidha, Ilāj bi'l-Dawā, and Ilāj bi'l-Tadbīr, to enhance students' understanding of neurological health in Unani medicine.</p>	2		0	1	0
15	<p>15 حميات Hummyāt (Fever)</p> <p>Under this topic, fevers will be comprehensively studied as per Unani literature, with a focus on their classification and management approaches. Students will learn to diagnose and manage fevers through '<i>Ilāj bi'l Dawā</i>' (pharmacotherapy), '<i>Ilāj bi'l Taghdhiya</i>' (dietary therapy), and '<i>Ilāj bi'l Tadbīr</i>' (regimen</p>	3	30	15	11	22

	therapy). The practical component will cover accurate measurement of temperature, differential diagnosis of fevers, diagnostic approach in undiagnosed fevers and <i>Nabz</i> (pulse) examination in febrile patients. The following sub-topics will be covered: 15.1 عمومی تعارف Umūmī Ta'ruf (General Introduction) 15.2 حمی یومِ حُمّی Hūmmā Yawm (ephemeral fevers) 15.3 حمی خلطیہ عفونیہ Hūmmā Khilṭiyya 'Ufūniyya 15.4 حمی مرکبہ Hūmmā Murakaba (Compound Fevers) 15.5 حمی حادہ Hūmmā Ḥādda (Acute Fevers) 15.6 حمی دقّیہ Hūmmā Diqqiyya (Cachexic Fever) 15.7 حمی درمیہ Hūmmā Waramiyya (Inflammatory Fevers) 15.8 بحران Buḥrān (Crisis)					
	Total	100	50	35	74	
Paper 2 (Moalajat (Medicine) Paper II)						
Sr.No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 NonLecture hours Theory	F2 NonLecture hours Practica I
16	16 Respiratory System Part 1: نزله وسعال Nazla wa Su'āl (Catarrh and Cough) This topic provides an in-depth understanding of <i>Nazla wa Su'āl</i> , focusing on the etiology, symptomatology, and treatment. Students will learn about the different types of <i>Nazla wa Su'āl</i> and their management.	1	16	2	1	0

17	<p>17 Respiratory System Part 2: داء انسداد الریه Dā Insidād al Ri'a (Obstructive Pulmonary Disease)</p> <p>This topic covers Obstructive Pulmonary Diseases, focusing on their definitions, causes, clinical features, complications, and management. It also includes Unani concepts and appropriate Ilaj Bit Tadbeer. Practical skills include spirometry and nebulization techniques for comprehensive care. The following diseases are covered:</p> <p>17.1 داء انسداد الریه مزمن Dā' Insidād al Ri'a Muzmin (Chronic Obstructive Pulmonary Disease)</p> <p>17.1.1 ورم شعب مزمن Waram Shu'ab Muzmin (Chronic Bronchitis)</p> <p>17.1.2 نفخ الریه Nafkha al-Ri'a (Emphysema)</p> <p>17.2 ضيق النفس شعبی Dīq al-Nafas Shu'abi (Bronchial Asthma)</p> <p>17.3 اتساع الشعب Ittisā ' al-Shu'ab (Bronchiectasis)</p>	1		4	2	8
18	<p>18 Respiratory System Part 3: تعديہ نظام تنفس: Ta'diya Nizām-i-Tanaffus (Infections of Respiratory System)</p> <p>This topic covers the Unani and modern concepts of respiratory infections, including their causes, clinical features, diagnosis, and management. It emphasizes interpreting diagnostic tests, chest X-rays, and identify key abnormalities to guide treatment, along with management for holistic care. The following diseases are covered:</p> <p>18.1 سل Sil (Pulmonary Tuberculosis)</p>	1		4	2	10

	<p>18.2 ذات الرئة Dhāt al-Ri'a (Pneumonia)</p> <p>18.3 دبله الریه Dubayla al- Ri'a (Lung Abscess)</p>					
19	<p>19 Respiratory System Part 4: تنفسي دسترس سندرم حاد: Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome)</p> <p>This topic provides an overview of ARDS, focusing on its phases, clinical settings, and diagnostic criteria. It covers clinical features, investigations, and management approaches, emphasizing ventilatory support, oxygen therapy, and fluid management for comprehensive care.</p>	1		1	2	0
20	<p>20 Respiratory System Part 5: سرطان شعير الریه: Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma)</p> <p>This topic focuses on the understanding of bronchial carcinoma, including its types, predisposing factors, clinical manifestations (thoracic and extra-thoracic), and management strategies. It covers diagnostic tools such as imaging techniques and biopsy, alongside the interpretation of reports. Emphasis is placed on integrating theoretical knowledge with practical skills through structured assessments and peer-based learning methods.</p>	1	7	1	1	2
21	<p>21 Respiratory System Part 6: داء الریه معاشی: Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)</p> <p>This topic covers the classification, risk factors, and pathophysiology of occupational lung diseases (OLD), focusing on respiratory symptoms. It also explores preventive and management strategies, integrating Unani medicine principles for improving</p>	1		1	2	0

	lung function and promoting respiratory health through adjustments to Asbāb Sitta Ḍarūriyya.					
22	<p>22 Respiratory System Part 7: امراض جنب: Amrāḍ-i-Janb (Diseases of Pleura)</p> <p>This topic explores Pleural diseases covering their pathophysiology, clinical features, and management approaches, with an emphasis on Unani therapeutic practices for addressing these conditions and promoting respiratory health. The following diseases are covered:</p> <p>22.1 ذات الجنب Dhāt al-Janb /Shuṣa (Pleurisy)</p> <p>22.2 استسقاء الصدر Istasqa-us- Ṣadr (Pleural Effusion)</p> <p>22.3 صدر مدمى Sadr-e-Mudammi (Haemothorax)</p> <p>22.4 نفخ الصدر Nafkha al-Ṣadr (Pneumothorax)</p> <p>22.5 قيح الصدر Qiḥ al-Ṣadr (Empyema)</p>	1	7	2	1	2
23	<p>23 Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases</p> <p>This topic covers the clinical assessment, diagnosis, and management of presenting problems in cardiovascular diseases. The focus will be on using conventional diagnostic methods along with Unani Therapeutic approaches to manage these conditions effectively. Key concepts include understanding clinical features, diagnostic tools, and comprehensive treatment plans. The following diseases are covered:</p> <p>23.1 قلب ضعف Ḍu'f Qalb</p>	2	17	4	2	4

	<p>23.2 غشى Ghashī (Syncope)</p> <p>23.3 خفقان Khafaqān (Palpitation)</p> <p>23.4 توقف القلب Tawaqf al-Qalb (Cardiac Arrest)</p> <p>23.5 سقوط قلب Suqūṭ Qalb (Heart Failure)</p>					
24	<p>24 Cardiovascular System Part 2: افلاس قلب Iflās-i-Qalb (Ischaemic Heart Disease)</p> <p>This topic covers ischemic heart diseases. Students will explore the pathophysiology, types, symptoms, and diagnostic approaches. The topic also highlights the potential benefits of Unani medicine in post-MI rehabilitation and discusses the role of diagnostic tests like 2D echocardiography and exercise testing in diagnosing ischemic heart disease. The following diseases are covered:</p> <p>24.1 وجع القلب Waja' al-Qalb (Angina Pectoris)</p> <p>24.2 ميتوتته القلب Maytūta al-Qalb (Myocardial Infarction)</p>	2		2	3	3
25	<p>25 Cardiovascular System Part 3: أمراض عضلة القلب Amrāḍ-i-'Aḍala al-Qalb (Diseases of Myocardium)</p> <p>This topic covers diseases of Myocardium, including its causes, clinical symptoms, differential diagnosis, investigations, and management, integrating Unani medicine and scientific advances. The topic also explores a holistic treatment plan for cardiomyopathies, focusing on dietary and lifestyle changes. The following diseases are covered:</p>	2	23	3	3	3

	<p>25.1 التهاب عضلات القلب Ittihābe Aḍal al-Qalb (Myocarditis)</p> <p>25.2 امراض عضلات القلب Amrād Aḍalat al-Qalb (Cardiomyopathies)</p>					
26	<p>26 Cardiovascular System Part 4: امراض صمامات قلب: Amrād-i-Ṣamāmāt-i-Qalb (Diseases of Heart Valves)</p> <p>The topic focuses on understanding heart valve disorders, including their classification, causes, pathophysiology, and clinical features. Students will explore the principles behind diagnosing heart valve issues, utilizing both conventional diagnostic tools and Unani medicine approaches. Students will create holistic treatment plans that integrate conventional and Unani management strategies, focusing on lifestyle and dietary modifications. Students will also learn to conduct thorough cardiovascular examinations, document clinical findings, and evaluate treatment methods. The following diseases are covered:</p> <p>26.1 التهاب بطانته القلب Ittihābe Baṭān al-Qalb (Infective Endocarditis)</p> <p>26.2 داء القلب حداري Dā' al-Qalb Hudāri (Rheumatic Heart disease)</p> <p>26.3 امراض صمام تاجي Amrād-i-Samām-i-Taji (Mitral valve Diseases)</p> <p>26.4 امراض صمام اورطي Amrād-i-Samām-i-Awriṭā (Aortic Valve Diseases)</p>	2		4	3	10

	26.5 امراض صمام ثلاثي Amrād-i-Samām-i-Salāsi (Tricuspid Valve Diseases)				
	26.6 امراض صمام ريوي Rīwī (Pulmonary Valve Diseases)				
27	27 Cardiovascular System Part 5: امراض رفتار قلب غير منظم Amrād-i-Raftar-i-Qalb Ghayr Munazim (Cardiac Arrhythmias) This topic covers the classification and clinical features of cardiac arrhythmias, focusing on their origins, symptoms, risks, and the Unani perspective. It includes the recognition of clinical features along with complications. The diagnostic approach emphasizes interpreting ECG findings to identify underlying causes, as well as understanding heart block types, clinical features, and the need for further investigations. The following diseases are covered: 27.1 سرعة القلب Sur'a al-Qalb (Tachycardia) 27.2 بطوء القلب Buṭū' al-Qalb (Bradycardia) 27.3 منوعت القلب Manuate Qalb (Heart Block)	2	4	2	7
28	28 Cardiovascular System Part 6: امراض غشاء القلب Amrād-i-Ghishā'-i-Qalb (Diseases of Pericardium) This topic covers the classification, etiopathogenesis, clinical features, complications, and differential diagnosis of pericardial diseases, along with investigations and prognosis. Students will explore holistic treatment plans combining conventional and Unani medicine, including dietary modifications and lifestyle changes. The following diseases are covered:	2	3	1	2

	<p>28.1 التهاب غلاف القلب Iltihābe Ghilāf –ul-Qalb (Pericarditis)</p> <p>28.2 استسقاء القلب Istisqā –ul-Qalb (Pericardial Effusion)</p>					
29	<p>29 أمراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders)</p> <p>This topic covers the classification, causes, risk factors, and diagnostic evaluation of circulatory disorders, including the use of conventional and Unani therapeutic approaches for management. Students will explore the complications and management strategies, integrating lifestyle changes, pharmacological treatments, and holistic interventions. The following diseases are covered:</p> <p>29.1 ضغط الدم قوى Daghṭ al-Dam Qawī (Hypertension)</p> <p>29.2 داء القلب ريوي Dā' al-Qalb Ri'wī (Cor Pulmonale)</p> <p>29.3 سقوط دوران خون Suqūṭ Daurāne Khoon (Circulatory failure)</p>	3	15	7	3	4
30	<p>30 أمراض الجهاز الدموي والغدادي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System)</p> <p>This topic covers diseases of Haemopoetic and Lymphatic System. It explores the pathophysiology, clinical features, and management strategies for these conditions, emphasizing Unani therapeutic approaches for health and overall well-being. The following diseases are covered:</p>	3	15	8	7	5

	<p>30.1 سوء القنیه. Sū al-Qinya</p> <p>30.2 فقر الدم Faq'r al-Dam (Anemia)</p> <p>30.3 بيموفيليا Haemophilia</p> <p>30.4 ليوكيميا Leukaemia</p> <p>30.5 لمفوما Lymphoma</p>					
31	<p>31 طبي اخلاقيات –Tıbbi Akhlaqiyāt (Medical Ethics)</p> <p>The study of medical ethics in Moalajat aims to equip students with a comprehensive understanding of ethical principles and their practical applications in clinical settings. This topic explores key critical ethical considerations encountered in the clinical practice which serve as the foundation of ethical medical practice. By engaging with these concepts, students will develop the skills necessary to navigate ethical dilemmas and enhance their ability to provide compassionate, patient-centered care. The following key aspects will be covered:</p> <p>33.1 طبي اخلاقيات کی نمائش (Exhibition of Medical Ethics), ہمدردی و پیشہ ورانہ سلوک, (Empathy and Professional Conduct)</p> <p>31.2 مریض کی خود مختاری و مشترکہ فیصلہ سازی (Patient Autonomy and Shared Decision-Making)</p> <p>31.3 طبي سندات کا اجرا (Issuance of Medical Certificates)</p> <p>31.4 رازداری و انحصاء (Confidentiality and Privacy)</p> <p>31.5 اقرار و انقی (Informed Consent)</p>	3	0	0	0	13

31.6 پیشہ ورانہ حدود و تنازع مفادات (Professional Boundaries and Conflicts of Interest)					
31.7 سریریاتی فیصلے (Clinical judgement)					
31.8 طبی قانونی معاملات کی اطلاع (Reporting of Medico-Legal Cases (MLCs))					
Total		100	50	35	73

Paper 3 (Moalajat (Medicine) Paper III)

Sr.No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 NonLecture hours Theory	F2 NonLecture hours Practica I
32	<p>32 امراض مری Amrāḍ-i-Marī (Diseases of the Oesophagus)</p> <p>This topic explores common oesophageal diseases, focusing on their etiology, pathophysiology, diagnosis, and management. Students will learn about clinical presentations, diagnostic methods, and basic management strategies, including lifestyle modifications and pharmacological treatments based on Unani Medicine and contemporary medical sciences. The curriculum emphasizes when to refer patients to specialists, effective communication with patients and caregivers, professionalism, ethical responsibilities, and proficiency in initial emergency care. Additionally, students will gain an understanding of the importance of early detection and a multidisciplinary approach to oesophageal disease management, preparing them with essential skills for both general and specialized practice. The following diseases will be covered under this topic:</p>	1	30	3	1	3

	<p>32.1 تقهقر المري Taqahqur-i-Marī (Gastro-esophageal reflux disease/GERD)</p> <p>32.2 عسر البلع 'Usr al-Bal' (Dysphagia)</p> <p>32.3 انطباق المري Inṭibāq al-Marī (Achalasia Cardia)</p> <p>32.4 ورم المري Waram-i-Marī (Esophagitis)</p>					
33	<p>33 امراض معدة Amrāḍ-i-Mi'da (Diseases of the Stomach)</p> <p>This topic offers a comprehensive overview of common diseases, covering their causes, underlying mechanisms, clinical signs, diagnostic approaches, and treatment options, integrating principles from both Unani Medicine and contemporary medical sciences. Students will learn to identify key symptoms, conduct thorough history-taking and physical exams, interpret relevant diagnostic tests, and apply appropriate management strategies. Emphasis is placed on prevention, early detection, and a multidisciplinary approach, equipping students with the skills to manage stomach diseases in primary and specialist settings. Additionally, students will develop competence in recognizing when to refer patients to specialists, communicating effectively with patients and caregivers, maintaining professionalism, adhering to ethical standards, and performing initial emergency care, ensuring they are prepared for comprehensive patient management across varied clinical environments. The following diseases will be covered under this topic:</p>	1		8	5	13

<p>33.1 ضعف الهضم، سوء الهضم، تخمير و بطلان الهضم Du'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm (Delayed digestion, Dyspepsia, Perverted digestion and failure of digestion)</p> <p>33.2 ورم معدة Waram-i-Mi'da (Gastritis)</p> <p>33.3 قروح معدة و اثنا عشرى Qurūḥ-i-Mi'da wa Athna 'Ashrī (Peptic Ulcer Disease / PUD)</p> <p>33.4 قيء الدم Qay' al-Dam (Hematemesis)</p> <p>33.5 فواق / بكي Fuwāq / Hichkī (Hiccup)</p> <p>33.6 جوع البقر (بوليموس) و جوع الكلب (الشهوة الكلبية) Jū' al-Baqar / Būlīmūs wa Jū' al-Kalb / Al-Shahwa al-Kalbiyya (Bulimia / Food aversion and Voracious appetite)</p> <p>33.7 وجع المعدة Waja' al-Mi'da (Gastralgia)</p> <p>33.8 ضعف المعدة Du'f al-Mi'da (Gastric debility)</p> <p>33.9 نفخ معدة Nafkh-i-Mi'da (Abdominal bloating)</p> <p>33.10 حرقت معدة Hurqat-i-Mi'da (Burning sensation of Stomach)</p> <p>33.11 ضعف و بطلان اشتها Du'f wa Buṭlān Ishteha (Poor Appetite)</p> <p>33.12 فساد الشهوة و الوحم Fasād al-Shahwa wa al-Waḥam (Pica / perversion of Appetite)</p> <p>33.13 قيء، تهوع، غثيان و تقلب النفس Qay', Tahawwu', Ghathayān wa Taqallub al-Nafas (Vomiting, Retching and Nausea)</p>					
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	33.14 سرطان معده Sarāṭān-i-Mi'da (Carcinoma of Stomach)					
34	34 امراض امعاء Amrāḍ-i-Am'ā' (Diseases of the Intestines) This topic offers a comprehensive overview of common intestinal diseases, covering their causes, pathophysiology, clinical features, diagnostic methods, and management strategies integrating principles from both Unani Medicine and contemporary medical sciences. Students will learn to recognize common symptoms, conduct thorough history-taking and physical exams, interpret relevant diagnostic tests, and apply appropriate management strategies. Emphasis is placed on prevention, early detection, and a multidisciplinary approach, equipping students with the skills to manage common intestinal diseases in primary and specialist settings. Additionally, students will develop competence in recognizing when to refer patients to specialists, communicating effectively with patients and caregivers, maintaining professionalism, adhering to ethical standards, and performing initial emergency care, ensuring they are prepared for comprehensive patient management across varied clinical environments. The following diseases will be covered under this topic: 34.1 دق الامعاء Diqq al-Am'ā' (Intestinal tuberculosis) 34.2 متحرک معوی سندرم Tehrīk Mi'v'i sīndrom (Irritable Bowel Syndrome / IBS) 34.3 مرض التهاب الأمعاء (مرض كرون مع التهاب القولون التقرحي) Marāḍ Iltihāb al-Am'ā' (Marāḍ Kūrūn Ma' Iltihāb al-Qūlūn	1		7	3	6

	<p>al-Taqar'ruḥī) [Inflammatory Bowel Disease / IBD (Crohn's disease and Ulcerative Colitis)]</p> <p>34.4 اسهال Ishāl (Diarrhoea)</p> <p>34.5 دوسنظاریا Dhūsaṅṭāriyā (Bloody Diarrhoea)</p> <p>34.6 زحیر Zāḥīr (Dysentery)</p> <p>34.7 نقص انجذاب Nuqṣ injīḍāb (Malabsorption syndrome & celiac disease)</p> <p>34.8 قوچ و ایلاؤس Qūlanj wa Īlā'ūs (Large and small Intestinal colic)</p> <p>34.9 دیدان الامعاء Dīdān al-Am'ā' (Intestinal worms)</p> <p>34.10 قبح Qabḍ (Constipation)</p> <p>34.11 بواسیر Bawāsīr (Haemorrhoid)</p>					
35	<p>35 امراض کبد Amrāḍ-i-Kabid (Diseases of the Liver)</p> <p>This topic covers common liver diseases, with emphasis on understanding their etiology, pathophysiology, clinical presentation, diagnostic approaches, and management strategies. Students will learn to recognize liver disease symptoms, interpret liver function tests, and utilize imaging and biopsy for diagnosis. Management principles, including lifestyle modifications, pharmacological treatments, and indications for liver transplantation, will be discussed. Preventive strategies, especially vaccination and lifestyle counseling, are highlighted, preparing students for holistic liver disease care in primary and specialty settings. The following diseases will be covered under this topic:</p>	2	45	8	4	10

	<p>35.1 ورم الكبد Waram al-Kabid (Hepatitis)</p> <p>35.2 استسقاء Istisqā' (Dropsy)</p> <p>35.3 تشحم الكبد Tashaḥhum al-Kabid (Fatty Liver Disease /FLD)</p> <p>35.4 ضعف الكبد Du'f al-Kabid (Hepatic insufficiency)</p> <p>35.5 سقوط الكبد Suqoot al-Kabid (Hepatic Failure)</p> <p>35.6 دويلة الكبد Dubayla al-Kabid (Liver abscess)</p> <p>35.7 تليف الكبد Tal'yīf al-Kabid (Cirrhosis of Liver)</p> <p>35.8 سرطان الكبد Sartān al-Kabid (Hepatic carcinoma)</p> <p>35.9 يرقان Yarqān (Jaundice)</p>					
36	<p>36 امراض كلية Amrāḍ-i-kulya (Diseases of the Kidney)</p> <p>This topic provides an overview of renal diseases, focusing on their causes, pathophysiology, clinical presentation, diagnosis, and management. Students will learn to identify the clinical manifestations of renal disorders, interpret relevant laboratory tests (such as urinalysis and kidney function tests), and utilize imaging for diagnosis. Emphasis will be placed on managing renal disease through lifestyle changes, pharmacotherapy, and renal replacement therapies (dialysis, transplantation) when necessary.</p> <p>Preventive strategies, early intervention, and the multidisciplinary nature of renal care will be highlighted to prepare students for patient-centered care in both general and specialized medical settings.</p> <p>The following diseases will be covered under this topic:</p>	2		7	3	10

	<p>36.1 سقوط الكلية Suqoot al-Kulya (Renal Failure)</p> <p>36.2 ضعف الكلية و هزال الكلية Du'f -i-Kulya wa Huzāl al-Kulya (Renal Insufficiency/ debility and Renal atrophy)</p> <p>36.3 وجع الكلية Waja' al-Kulya (Renal pain)</p> <p>36.4 ورم الكلية Waram al-Kulya (Nephritis)</p> <p>36.5 حصى و رمل الكلية Ḥaşā wa Raml al-Kulya (Renal calculus and concretions /Renal stones)</p> <p>36.6 دق الكلية Diqq al-Kulya (Renal tuberculosis)</p> <p>36.7 نقرية تنك سندرم و نفروتنك سندرم Nyfraytīk sīndrom wa Nyfrītīk sīndrom (Nephritic syndrome and Nephrotic syndrome)</p>					
37	<p>37 امراض مثانة Amrāḍ-i-Mathāna (Diseases of the Bladder)</p> <p>This topic introduces common bladder disorders, focusing on etiology, pathophysiology, clinical presentation, diagnosis, and management. Students will learn to recognize typical symptoms (such as dysuria, frequency, urgency, and hematuria), interpret diagnostic tests (urinalysis, imaging, cystoscopy), and understand management options, including lifestyle modifications, pharmacotherapy, surgical intervention, and preventive strategies. Emphasis is placed on a holistic approach to bladder health, early detection of malignancies, and patient counseling, equipping students with essential skills for effective diagnosis and management in both primary care and specialized urology settings. The following diseases will be covered under this topic:</p>	2		3	2	3

	<p>37.1 حرقه البول Hurqa al-Bawl/ Ta'dia al-Majāri-i-Bawl (Urinary Tract Infection / UTI)</p> <p>37.2 بول الدم Bawl al-Dam (Haematuria)</p> <p>37.3 سلس البول و تقطير البول Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD)</p> <p>37.4 كثرة البول و قلة البول Kathra al-Bawl wa Qilla al-Bawl (Polyuria and Oliguria)</p> <p>37.5 ورم المثانة Waram al-Mathāna (Cystitis)</p> <p>37.6 حصى و رمل المثانة Ḥṣā wa ramal al-Mathāna (Vesicolithiasis)</p> <p>37.7 احتباس البول Iḥtibās al-Bawl (Urinary Retention)</p>					
38	<p>38 أمراض اعضاء تناسلية مردانه Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders)</p> <p>This topic covers male genital disorders with a focus on sexual and reproductive health, examining their etiology, pathophysiology, clinical presentation, diagnostic workup, and management. Students will learn to recognize the impact of these conditions on physical and psychological well-being, perform relevant assessments, interpret laboratory findings (e.g., semen analysis, hormone profiles), and understand treatment modalities, including pharmacologic, behavioural, and counseling approaches. Emphasis is placed on patient-centered care, effective communication, and addressing stigma, equipping students to provide holistic support and management in both general and specialized</p>	2		6	3	6

	<p>clinical settings. The following topics will be covered under this topic:</p> <p>38.1 ضعف الباه Du'f al-Bāh (sexual debility)</p> <p>- قلت المنوية Qilla al-Manvīya (Oligospermia)</p> <p>- قلت الحويثات المنوية Qilla al- Huwainiyat al-Manvīya (Oligozoospermia)</p> <p>- عقر 'Uqr (Infertility)</p> <p>38.2 سرعة الانزال Sur'a al-Inzāl (Premature ejaculation)</p> <p>38.3 كثرة الاحتلام Kathra al-Ihtilām (Excessive Nocturnal Emission)</p> <p>38.4 سيلان مني و مذى Sailan Manī wa Mazī (Spermatorrhea and Pre-ejaculate)</p> <p>38.5 نقص نعوظ Nuqse Na'ūd (Erectile dysfunction / ED)</p>					
39	<p>39 امراض متعددي Amrād-i-Muta'di (Infectious Diseases)</p> <p>This topic introduces the fundamental principles of infectious diseases, covering their causative agents, transmission, pathophysiology, clinical features, diagnosis, and management. Students will learn diagnostic techniques (e.g., cultures, PCR, serology), infection control practices, antibiotic stewardship, and the importance of vaccination and preventive strategies. Emphasis is placed on understanding host-pathogen interactions, recognizing symptoms early, and implementing evidence-based treatments, preparing students for effective infectious disease management in both community and hospital</p>	3	25	14	6	16

<p>settings. The following diseases will be covered under this topic:</p> <p>39.1 مرض انفلونزا ویروسی Marāḍ ān'flūynza Vayrūsī (Influenza virus disease)</p> <p>39.2 مرض سارس Marāḍ Sārīs (SARS / Severe Acute Respiratory Syndrome)</p> <p>39.3 مرض کورونا ویروسی Marāḍ Kūrūna Vayrūsī (Coronavirus disease)</p> <p>39.4 داء الليبتوسپیروسیس و حمی - کیو Dā'al-lybtūsbirūsīs wa Ḥummā-Q (Leptospirosis / Weil's disease and Q-Fever)</p> <p>39.5 حمی معویہ Ḥummā Mi'v'iya (Enteric fever)</p> <p>39.6 حمی اجامیہ Ḥummā Ajāmiyya (Malarial fever)</p> <p>39.7 حمی دنج Ḥummā Danj (Dengue Fever)</p> <p>39.8 حمی چیکونگونیا Ḥummā Chikūngūnyā (Chikungunya fever)</p> <p>39.9 کالازر Kālār Kālār (Leishmaniasis)</p> <p>39.10 طاعون Ṭā'ūn (Plague)</p> <p>39.11 مرض ایبولا ویروسی Marāḍ Aybolā Vayrūsī (Ebola virus disease)</p> <p>39.12 مرض زیکا ویروسی Marāḍ Ḍika Vayrūsī (Zika Virus)</p> <p>39.13 حمی میمون ویروسی امراض جنگلی کیسانور Ḥummā Maymūn Vayrūsī / Marāḍ janglī Kīyāsānūr (Monkey Fever / Kyasanur Forest Disease / KFD)</p>					
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	<p>39.14 وی و ایڈز آئی - آئی - آئی Aych-āī-vī wa aydz (HIV and AIDS)</p> <p>39.15 ہیضہ وبائی Hayda Wabā'ī (Cholera)</p> <p>39.16 التهاب الدماغ الياباني - ب B (Japanese B Encephalitis)</p> <p>39.17 داء الفيل المنغولي Dā' al-Fīl al-limfāwīya (Lymphatic filariasis)</p> <p>39.18 داء الشريطيات و داء الكيسات المذنبة و داء الكيسات المذنبة العصبي Dā'al-sharītiāt wa Dā'al-kīsāt al-mudhanibāt wa Dā'al-kīsāt al-mudhanibāt al-a'sabī (Taeniasis, Cysticercosis and Neurocysticercosis)</p> <p>*Note: To include recent endemic/ pandemic diseases</p>					
40	<p>40 أمراض مفاصل وعظام Amrāḍ-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders)</p> <p>This topic covers common musculoskeletal disorders, focusing on etiology, pathophysiology, clinical presentation, diagnosis, and management. Students will learn to assess joint and muscle function, perform relevant physical examinations, interpret imaging (e.g., X-rays, MRIs), and understand treatment options, including pharmacologic management, physical therapy, and surgical interventions when necessary. Emphasis is placed on preventive strategies, rehabilitation, and patient education for managing chronic musculoskeletal conditions, equipping students with essential skills for providing comprehensive musculoskeletal care in both primary</p>	3		4	3	6

<p>and specialized settings. The following diseases will be covered under this topic:</p> <p>40.1 التهاب المفاصل Ittihāb al-Mafāṣil (Inflammatory Arthritis):</p> <ul style="list-style-type: none"> - وجع المفاصل حداري Waja' al-Mafāṣil Ḥudāri (Rheumatoid Arthritis) - نقرس Niqris (Gout) - التهاب الفقرات التصلبي Ittihāb al-Faḡarāt al-tasalubī (Ankylosing Spondylitis) <p>40.2 وجع المفاصل متعدي Waja' al-Mafāṣil Muta'dī (Infective Arthritis):</p> <ul style="list-style-type: none"> - وجع المفاصل عفوني Waja' al-Mafāṣil 'Ufūnī (Septic Arthritis) - وجع المفاصل ويريوي Waja' al-Mafāṣil Vayrūsī (Viral Arthritis) - التهاب العظم والنقي Ittihāb al-'Azḡm wa al-naqī (Osteomyelitis) - وجع المفاصل سلي Waja' al-Mafāṣil Sillī (Tubercular Arthritis) <p>40.3 وجع المفاصل Waja' al-Mafāṣil (Osteoarthritis / OA)</p> <p>40.4 وجع الظهر ووجع الخصر Waja' al-Zahr wa Waja' al-Khāṣira (Upper and Lower backache)</p> <p>40.5 حدبه ورياح الأفرسة Ḥadaba wa Riyāḡ al-Afrisa (Kyphosis and Koch's spine)</p>					
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	<p>40.6 تأخر وصلابة المفاصل Taḥajjur wa Ṣalāba al-Mafāsil (Ankylosing Arthritis)</p> <p>40.7 عرق النساء 'Irq al-Nasā (Sciatica)</p> <p>40.8 لين العظام و وهن العظام Lin al-'izām wa Wahn al-'izām (Osteomalacia and Osteoporosis)</p> <p>40.9 اعتلال العضلات I'tilāl al-'Aḍalāt (Myopathies):</p> <p style="padding-left: 40px;">اعتلال العضلات مورثي - I'tilāl al-'Aḍalāt Mawrūthī (Inherited / Genetic Myopathies)</p> <p style="padding-left: 40px;">اعتلال العضلات اكتسابي - I'tilāl al-'Aḍalāt Iktisābī (Acquired Myopathies)</p>					
	Total	100	60	30	73	
	Grand Total	300	160	100	220	

Table 3 : Learning objectives of Course

Paper 1 (Moalajat (Medicine) Paper I)										
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 امراض نفساني Amrāḍ-i-Nafsānī (Psychiatric Disorders) (LH : 6, NLHT: 3, NLHP: 6 hours)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define Amrāḍ-i-Nafsānī (Psychiatric Disorders) and classify them into common categories according to DSM-5 and also describe their common clinical features, along with nomenclature of Mālankhūliyā (melancholia) and its various sub-types.	CK	MK	K	L&PPT , L	T-CS, QZ	F&S	1	-	LH
CO1	Explain the Asbāb (causes) of Mālankhūliyā (Melancholia), including the role of Sauda and other Akhlāṭ (humors), and describe the clinical symptoms associated with Mālankhūliyā (Melancholia) and its sub-types.	CC	MK	KH	L, L&PPT	S-LAQ, T-CS	F&S	1	-	LH
CO3	Identify the clinical features of major Amrāḍ-i-Nafsānī (Psychiatric Disorders), including Iḍṭarābāt al-Akt'ābī (Depressive Disorders), Iḍṭarābāt al-Qalaq (Anxiety Disorders), and Mālankhūliyā (Melancholia), and explain their distinguishing characteristics.	CC	MK	K	L&PPT , L	CL-PR, QZ , T-CS	F&S	1	-	LH
CO3	Recognize how Mālankhūliyā differs from other mental disorders such as Ḥumq, Ru'ūnat, Junūn, Ikhtilāṭ al-'Aql, Ṣubārā and other psychiatric disorders like bipolar disorder or anxiety.	CAP	MK	KH	BS, RP	QZ , CL-PR, T-CS	F&S	1	-	NLHT1.1

CO4	Develop a comprehensive understanding of Principles of management and management of Amrāḍ-i-Nafsānī (Psychiatric Disorders) including Iḍṭarābāt al-Akt'ābī (Depressive Disorders), Iḍṭarābāt al-Qalaq (Anxiety Disorders), Mālankhūliyā (Melancholia), and their psychotherapeutic approaches.	CS	MK	KH	L&PPT , L&GD	T-CS, S-LAQ, CBA	F&S	1	-	LH
CO1, CO3, CO4	Explain the nomenclature of Dā' al-Kalb, Mālankhūliyā Marāqī, Quṭrub including symptoms, causes, and treatment approaches.	CC	DK	KH	LS, SDL	VV-Viva, CL-PR, COM	F&S	1	-	NLHT1.2
CO1, CO3	Define Sahar (Insomnia) and recall its types, including acute and chronic forms, as well as differentiate between primary insomnia and insomnia secondary to other medical or psychiatric disorders.	CK	MK	K	L&GD, L&PPT	CBA, S-LAQ, T-CS	F&S	1	-	LH
CO4	Describe the holistic comprehensive treatment plan for managing Sahar (Insomnia) based on the principles of Unani Medicine including the integration of dietary modifications, lifestyle changes, and psychotherapeutic approaches, demonstrating an understanding of how each component contributes to effective management of the condition.	CS	MK	KH	CBL, FC, PBL, SIM	T-CS, S-LAQ, CBA	F&S	1	-	NLHT1.3
CO1, CO3	Describe drug addiction and classify it as a substance-related and addictive disorder according to DSM-5. Identify the clinical symptoms and behavioral signs of drug addiction, along with its short-term and long-term consequences.	CK	MK	K	L, L&PPT	S-LAQ, T-CS	F&S	1	-	LH

C02, CO6	Demonstrate empathy while explaining the treatment plan to a patient diagnosed with Sahar (Insomnia).	AFT-VAL	MK	SH	RP, SIM	P-EXAM, OSCE, P-PRF, CBA	F&S	1	-	NLHP1.1
C02, CO6	Demonstrate the ability to counsel a patient diagnosed with Iḍṭarābāt al-Akt'ābī (Depressive Disorders) by employing empathetic communication skills, understanding the patient's emotional and psychological needs, providing guidance on Unani and modern treatment options, and supporting adherence to the treatment plan.	AFT-VAL	MK	SH	SIM	CBA, OSCE	F&S	1	-	NLHP1.2
CO3	Demonstrate how to perform a comprehensive Mental Status Examination (MSE) to assess a patient's cognitive, emotional, and psychological health using standardized procedures, explaining each step as you proceed.	PSY-GUD	MK	SH	D, CBL	PA, P-EXAM, CHK	F&S	1	-	NLHP1.3

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT1.1	Differential Diagnosis of Mālankhūliyā (Melancholia)	<p>1. Brainstorming Session (45-60 mins):</p> <ul style="list-style-type: none"> Divide students into small groups and provide them with large sheets of paper or whiteboards. Ask each group to brainstorm and write down the distinguishing features of Mālankhūliyā compared to other mental disorders like Ḥumq, Ru'ūnat, Junūn, Ikhtilāṭ al-'Aql, and modern disorders like bipolar disorder and anxiety. Encourage students to discuss their prior knowledge and misconceptions while collectively identifying key differences and similarities among these disorders.

		<p>2. Role Play (Optional):</p> <ul style="list-style-type: none"> • Assign roles to students, where some take on the persona of a patient experiencing Mālankhūliyā, while others represent individuals with different disorders (e.g., a patient with bipolar disorder, anxiety, etc.). The “patients” should exhibit specific symptoms while the “healthcare providers” ask questions and try to differentiate between the disorders based on the presented symptoms. • Foster empathy and understanding of how different disorders manifest. This activity allows students to engage in clinical reasoning and develop diagnostic skills in a realistic context. • After the role-playing, have a guided class discussion where students share their insights and observations. This could involve exploring the key symptoms that distinguish Mālankhūliyā from other disorders, reinforcing their learning and understanding through reflection and feedback.
NLHT1.2	Exploring Dā’ al-Kalb, Mālankhūliyā Marāqī, and Quṭrub	<p>1. Library Session (60 mins):</p> <ul style="list-style-type: none"> • Schedule a session in the library where students can access physical Unani medicine resources (e.g., classical texts like Al-Qānūn fī al-Ṭibb, Kitāb al-Ḥāwī, etc) and modern medical literature. Students should use this time to expand on their SDL research, consulting reference books or manuscripts not available online. • After library sessions, organize a peer-review session where students present their findings to classmates. Feedback can be provided, and the students can collectively discuss differences in their approaches and the key insights they gained from the research.

		<p>2. Self-Directed Learning (Optional):</p> <ul style="list-style-type: none"> • Provide students with specific research questions and guide them to explore the nomenclature, symptoms, causes, and treatment approaches of Dā' al-Kalb, Mālankhūliyā Marāqī, and Quṭrub. Assign relevant resources like textbooks, Unani manuscripts, journal articles, and other online Unani medicine databases. • Students should create individual reports summarizing their understanding, highlighting the key differences and similarities among these conditions, and detailing the Unani treatment approaches such as Ilāj bi'l Dawā (pharmacotherapy), Ilāj bi'l Taghdhiya (dietary therapy), and Ilāj bi'l Tadbīr (regimen therapy). • Encourage students to develop independent research skills and take ownership of their learning, ensuring a deep understanding of the topics at hand. The focus is on critical analysis and synthesis of the literature. • After SDL is complete, organize a peer-review session where students present their findings to classmates. Feedback can be provided, and the students can collectively discuss differences in their approaches and the key insights they gained from the research.
NLHT1.3	<p>Holistic Management of Sahar (Insomnia)</p>	<p>Any one of the given activities:</p> <p>1. Flipped Classroom (In Class:60 mins):</p> <ul style="list-style-type: none"> • Assign preparatory reading materials on the Unani principles of treating Sahar before the class. In the actual session, instead of lecturing, facilitate discussions where students apply what they have learned. They can be tasked with explaining their treatment plans for Sahar, integrating dietary and psychotherapeutic approaches.

		<p>2. Case-Based Learning (45-60 mins):</p> <ul style="list-style-type: none">• Present a detailed case study of a patient suffering from Sahar with specific symptoms and challenges (e.g., chronic insomnia with psychological and dietary factors). Students work in groups to analyze the case, diagnose the condition, and explaining a comprehensive Unani treatment plan, incorporating dietary modifications, lifestyle changes, and psychotherapeutic approaches. <p>3. Problem-Based Learning (45-60 mins):</p> <ul style="list-style-type: none">• Pose a clinical problem to the students: "A patient presents with chronic Sahar (insomnia) that has not responded to previous treatments. How would you explain a comprehensive Unani-based treatment plan?" Students work in teams to research the causes, treatment modalities, and preventative strategies for Sahar, culminating in the formulation of an individualized, holistic treatment approach.• After the activities, hold a debriefing session where students share their experiences, discuss challenges they faced during role plays or simulations, and review the treatment plans. <p>4. Simulation (45-60 mins):</p> <ul style="list-style-type: none">• Conduct a simulation exercise where students diagnose and treat a simulated patient with Sahar. They will perform steps like taking a detailed patient history, examining the sleep patterns, and explaining a comprehensive Unani treatment plan. They will utilize tools such as sleep hygiene evaluation forms, dietary charts, and treatment protocols
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		based on Ilāj bi'l Taghdhiya (dietary therapy), Ilāj bi'l Tadbīr (regimen therapy), and psychotherapeutic interventions.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP1.1	Demonstration of Empathy while treatingSahar (Insomnia)	<p>Any one of the given activities:</p> <p>1. Simulation (120 mins):</p> <p>A. Introduction and Briefing (15 Minutes): Deliver a short lecture on empathetic communication specific to Sahar. Highlight the simulation process, including scenario overview. Expected roles (student as the doctor, simulated patient). Evaluation criteria for demonstrating empathy (e.g., active listening, addressing emotional concerns, clarity in communication).</p> <p>B. Simulation Exercise (60 Minutes)</p> <p>Step 1: Set up the simulation station. Use a simulated patient (trained actor or faculty member) portraying a patient diagnosed with Sahar. Equip the room with relevant props (e.g., patient medical file, prescription pad).</p> <p>Step 2: Student participation.</p> <ul style="list-style-type: none"> ▪ Each student plays the role of a doctor explaining the treatment plan to the simulated patient. ▪ The simulated patient will exhibit typical concerns of someone with Sahar, such as anxiety, frustration, or skepticism about treatment efficacy.

Step 3: Focus on key skills.

- Listen actively to the patient's concerns.
- Provide clear, compassionate explanations of the treatment plan (e.g., sleep hygiene, Unani therapies, dietary modifications, stress management).
- Reassure and motivate the patient while addressing emotional needs.
- Rotate students to ensure each gets a chance to interact with the simulated patient.

C. Observer Feedback and Self-Reflection (20 Minutes): Assign a few students as observers for each simulation session. Observers should note:

- Use of empathetic language and tone.
- How well the student addressed the patient's emotional concerns.
- Clarity and structure of the explanation.
- After each simulation, both observers and the facilitator provide constructive feedback.
- Encourage the student who performed to share their own experience and reflect on areas for improvement.

D. Group Discussion and Insight Sharing (20 Minutes): Discuss:

- Common challenges faced during the simulation.
- Effective approaches to build trust and rapport with patients.
- Key insights about Sahar management from an empathetic perspective.
- Explore how empathetic communication impacts patient adherence to treatment plans.

E. Wrap-Up and Summary (5 Minutes)

- Summarize the critical role of empathy in patient communication.
- Share a checklist or framework for empathetic consultations.
- Encourage students to apply these skills in real-life clinical settings.

Additional Resources:

- **Video Demonstrations:** Show pre-recorded simulations of empathetic consultations to set a benchmark.
- **Evaluation Sheet:** Provide a rubric to evaluate empathy skills, including verbal and non-verbal communication.
- **Practice Cases:** Share additional case scenarios for self-practice or homework.

2. Role Play (120 mins):

A. Introduction and Briefing (15 minutes)

- Deliver a short lecture on the principles of empathetic communication.
- Discuss the common challenges faced by patients with Sahar (e.g., frustration, hopelessness, anxiety about sleep).
- Highlight key elements of effective communication, including active listening, non-verbal cues, and compassionate language.

B. Role-Playing Scenarios (50 minutes)

Step 1: Divide the class into pairs or small groups (doctor-patient roles).

Step 2: Provide each group with a case scenario involving a patient diagnosed with Sahar. Include specific details like:

		<ul style="list-style-type: none">• Patient's age, occupation, sleep history, lifestyle, and comorbid conditions.• Recommended treatment plan (e.g., lifestyle modifications, dietary changes, herbal medications, cognitive behavioral therapy, etc.). <p>Step 3: Students acting as doctors must explain the treatment plan empathetically, addressing the patient's concerns and emotions.</p> <ul style="list-style-type: none">• Rotate roles so all students experience both doctor and patient perspectives. <p>C. Observations and Peer Feedback (20 minutes): Assign a few students as observers for each role-play. Observers provide constructive feedback on:</p> <ul style="list-style-type: none">• Use of empathetic language.• Non-verbal communication (tone, gestures, facial expressions).• How well the student addressed the patient's emotions and concerns. <p>D. Guided Group Discussion (25 minutes)</p> <ul style="list-style-type: none">• Discuss key takeaways from the role-play.• Explore challenges faced during the activity (e.g., handling difficult questions, emotional patients).• Highlight strategies for building trust and rapport with patients diagnosed with Sahar. <p>5. Wrap-Up and Summary (10 minutes)</p> <ul style="list-style-type: none">• Summarize the importance of empathy in clinical practice.• Provide quick tips for maintaining empathy during consultations.
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		<ul style="list-style-type: none"> • Allow a brief Q&A session for clarification. <p>Additional Resources:</p> <ul style="list-style-type: none"> • Provide a checklist of empathetic communication skills. • Share videos or real-life examples of empathetic doctor-patient interactions.
NLHP1.2	<p>Counselling a Patient with Iḍṭarābāt al-Akt'ābī (Depressive Disorders)</p>	<p>1. Simulation (120 mins):</p> <p>A. Introduction and Briefing (15 Minutes): Provide an overview of symptoms of depression (low mood, fatigue, loss of interest, etc.). Patient psychology and the emotional challenges they may experience. Importance of empathy in counseling. Key components of Unani treatment and modern approaches (e.g., psychotherapy, SSRIs). Explain the structure of the simulation i.e. role of the student as the counselor, simulated patient profile and scenario. Share evaluation criteria: empathetic communication, clarity in treatment guidance, understanding emotional needs, and encouraging adherence.</p> <p>B. Simulation Rounds (60 Minutes): Arrange a counseling station with a simulated patient (trained actor or faculty) seated across from the student in a quiet, private setting. Provide props like patient files, note pads, or therapy brochures.</p> <p>Scenario: Patient Profile:</p> <ul style="list-style-type: none"> • Name: Mr./Ms. X, 35 years old. • Diagnosis: Depression. • Symptoms: Persistent sadness, loss of interest in activities, difficulty concentrating, fatigue, sleep disturbances, and occasional thoughts of hopelessness.

		<ul style="list-style-type: none">• Background: Recently experienced a significant personal or professional setback (e.g., job loss, relationship issues).• Concerns: Fear of stigma, reluctance to take medication, uncertainty about Unani therapies, and feelings of hopelessness about improvement. <p>Instructions to the Student:</p> <ul style="list-style-type: none">• Greet the patient with warmth and compassion.• Build rapport and encourage the patient to share their feelings and concerns.• Actively listen and validate the patient's emotions (e.g., "It's understandable to feel this way after what you've been through").• Explain the treatment plan in a simple and non-threatening manner, including:<ul style="list-style-type: none">○ Unani treatments: Lifestyle modifications, remedies, and relaxation techniques.○ Modern treatments: Importance of psychotherapy (CBT, counseling) and potential benefits of medication if needed.• Address any concerns the patient may have, such as stigma or fear of side effects.• Motivate the patient to adhere to the treatment plan and reassure them about the possibility of recovery. <p>Instructions to the Simulated Patient:</p> <ul style="list-style-type: none">• Act emotionally guarded at first but gradually open up if the student demonstrates empathy and effective communication.
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- Express common concerns, such as: “What if the treatment doesn’t work for me?”, “I’m worried about becoming dependent on medication.”, “I feel like nobody understands what I’m going through.”
- Provide cues about improvement in mood if the student responds empathetically and gives reassurance.

Execution: Divide students into groups of 4-6. Each group gets 10 minutes for the simulation (8 minutes for interaction and 2 minutes for feedback). Rotate roles to allow multiple students to counsel the simulated patient.

C. Feedback and Debriefing (30 Minutes)

- **Facilitator Feedback:** Highlight each student’s strengths and areas for improvement. Emphasize how empathy impacts a patient’s trust and adherence to the treatment plan.
- **Peer Feedback:** Students observe their peers and provide feedback, focusing on communication, empathy, and clarity.
- **Self-Reflection:** Ask each student to share how they felt during the interaction, challenges faced, and what they learned.
- **Discussion Points:**

-Importance of addressing emotional needs before treatment explanations.

-Strategies to motivate adherence to treatment.

-Real-world application of these skills in clinical practice.

D. Group Discussion and Wrap-Up (15 Minutes)

- Recap key takeaways:

		<ul style="list-style-type: none"> ○ Effective counseling combines medical knowledge with empathy. ○ Addressing emotional and psychological needs is crucial for treatment success. ● Discuss: <ul style="list-style-type: none"> ○ Common misconceptions about depression and its treatments. ○ Techniques to handle resistant or skeptical patients. ● Share a checklist for counseling patients with depression: <ol style="list-style-type: none"> 1. Greet warmly and build rapport. 2. Validate emotions and actively listen. 3. Explain treatment options clearly and simply. 4. Address concerns about stigma or side effects. 5. Encourage adherence and provide hope. <p>-Evaluation Rubric: Provide a checklist to assess:</p> <ul style="list-style-type: none"> ● Empathy (tone, active listening, emotional validation). ● Clarity in explaining treatment options. ● Addressing concerns and motivating adherence. <p>-Supplemental Videos: Show examples of effective counseling sessions for reference.</p> <p>-Role Variations: Introduce additional patient profiles with varied symptoms or concerns for practice.</p>
NLHP1.3	Mental Status Examination (MSE)	<p>Demonstration → Case-Based Learning (120 mins)</p> <p>1. Demonstration (45 Minutes)</p>

A. Introduction: Briefly explain the purpose of MSE in clinical practice. Outline the key components of MSE:

- **Appearance and Behavior**
- **Speech**
- **Mood and Affect**
- **Thought Process and Thought Content**
- **Cognition** (orientation, attention, memory, language, executive functioning).
- **Insight and Judgment**

B. Live Demonstration: Perform a complete MSE on a simulated patient in real-time. Explain each step and its significance while demonstrating. The following structure can be used:

- **Appearance and Behavior:** Observe and describe the patient's posture, grooming, eye contact, and motor activity.
- **Speech:** Comment on rate, tone, and coherence of speech.
- **Mood and Affect:** Ask questions like "How have you been feeling recently?" and observe congruence between mood and affect.
- **Thought Process and Content:** Evaluate coherence, organization, delusions, or obsessive thoughts by prompting questions like, "Can you tell me more about your thoughts recently?"
- **Cognition:** Assess orientation (person, place, time), attention (serial sevens or digit span), memory (recall of words), and abstract thinking (proverb interpretation).
- **Insight and Judgment:** Use scenarios like, "What would you do if you found a wallet on the street?" to assess reasoning.

- Engage students by asking guiding questions like, “What do you observe about the patient's behavior?”

C. Q&A and Clarifications:

- Allow students to ask questions regarding the procedure.
- Discuss variations for specific psychiatric conditions (e.g., MSE for depression vs. psychosis).

2: Case-Based Learning (75 Minutes)

Setup: Divide students into groups of 5-6. Provide each group with a different case scenario involving a simulated patient (either a simulated patient or pre-recorded videos). **Steps of the Activity:**

A. Case Assignment: Provide a written case vignette describing the patient's background, presenting complaints, and behavioral observations. Example Case:

- **Patient Name:** Mr. A, 40 years old.
- **Complaint:** Feeling low, difficulty sleeping, and lack of concentration for the past month.
- **Background:** Recently lost his job and feels hopeless about the future.

B. Group MSE Exercise:

- **Task:** Each group performs an MSE on the simulated patient. One student leads the MSE as the “clinician.” Other group members observe and take notes for feedback.
- Focus on eliciting key findings for each MSE component.

		<p>C. Group Presentation: Each group presents their findings and observations to the class:</p> <ul style="list-style-type: none"> • Key observations under each MSE component. • Differential diagnoses based on findings. • Challenges they faced during the assessment. <p>D. Facilitator Feedback</p> <ul style="list-style-type: none"> • Instructor provides feedback on the accuracy and comprehensiveness of the groups' MSEs. • Highlight effective questioning techniques, areas for improvement, and common mistakes. <p>E. Discussion</p> <ul style="list-style-type: none"> • Discuss how MSE findings contribute to the overall diagnosis and treatment plan. • Explore the application of MSE in various psychiatric disorders (e.g., depression, bipolar disorder, schizophrenia).
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Topic 2 امراض غدد الاقنانه **Amrād-i-Ghudud lā Qanātī (Endocrine Disorders)** (LH : 4, NLHT: 1, NLHP: 4 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe Amrād-i-Ghudud lā Qanātī (Endocrine Disorders) and classify them into categories, explaining the various disorders associated with the pituitary, thyroid, and adrenal glands.	CK	MK	K	L, L&PPT	PUZ, QZ	F&S	1	-	LH

CO1	Illustrate the pathophysiology of Amrāḍ-i-Ghudud lā Qanāṭī (Endocrine Disorders), highlighting the role of hormone imbalances (such as excess or deficiency) and their systemic effects.	CC	DK	KH	PL, SDL, CBL, FC	CL-PR, T-OBT, M-POS	F&S	1	V-KUT	NLHT2.1
CO3	Identify the clinical signs and symptoms of pituitary, thyroid and adrenal gland disorders.	CK	MK	K	L, L&PPT	QZ, T-CS, PUZ	F&S	1	-	LH
CO3	Explain the laboratory investigations and diagnostic techniques used in the evaluation of Amrāḍ-i-Ghudud lā Qanāṭī (Endocrine Disorders), including hormonal assays, imaging studies and dynamic function tests.	CC	MK	KH	L&PPT, L	T-CS, Log book, CHK	F&S	1	-	LH
CO1	Apply knowledge of Unani medicine for the management of endocrine gland disorders and demonstrate an understanding of modern medical management, including pharmacological treatments for thyroid, adrenal, and pituitary disorders.	CAP	DK	KH	L, L&GD	COM, CR-RED	F&S	1	-	LH
CO3	Demonstrate how to accurately interpret hormonal assay results by analyzing laboratory data, correlating findings with clinical symptoms, and formulating differential diagnoses for various endocrine disorders in a simulated clinical setting.	PSY-GUD	MK	SH	LRI	P-PRF, P-EXAM, CHK	F&S	1	-	NLHP2.1
CO1	Perform a thorough clinical assessment of Amrāḍ-i-Ghudud-i-Daraqiyya (Thyroid Disorders) by explaining the process of performing a physical examination, obtaining relevant medical history, and interpreting clinical findings to formulate an initial diagnosis.	PSY-GUD	MK	SH	D, RP, SIM	P-EXAM, DOPS, OSCE, DOPS, P-VIVA	F&S	1	-	NLHP2.2
Non Lecture Hour Theory										

S.No	Name	Description of Theory Activity
NLHT2.1	Pathophysiology of Amrāḍ-i-Ghudud lā Qanāṭī (Endocrine Disorders)	<p>Any one of the given activities:</p> <p>1. Case-Based Learning (60mins)</p> <p>Activity Description: Provide case scenarios related to pituitary, thyroid, and adrenal gland disorders (e.g., Cushing’s syndrome, hypothyroidism, or acromegaly). Students work in small groups to analyze the cases, focusing on pathophysiology, hormonal imbalances, and systemic effects.</p> <p>Steps:</p> <ul style="list-style-type: none"> • Phase 1: Present cases (e.g., a patient with unexplained weight gain, lethargy, or hyperpigmentation). • Phase 2: Groups discuss the underlying pathophysiology and hormone imbalances, referencing diagrams and clinical data. • Phase 3: Each group presents their findings, followed by a guided class discussion. <p>2. Flipped Classroom (60 mins for in-class activity).</p> <p>Activity Description: Assign students pre-recorded lectures or readings on the pathophysiology of endocrine disorders. Use class time for application-focused activities (e.g., case discussion or problem-solving).</p> <p>Steps:</p> <ol style="list-style-type: none"> 1. Pre-class: Students study hormone imbalances and their systemic effects.

		<p>2. In-class: Discuss real-world scenarios and clinical applications.</p> <p>3. Self Directed Learning (Optional):</p> <ul style="list-style-type: none"> • Ask students to investigate a specific endocrine disorder and create a detailed report on its pathophysiology. • Ask students to review a provided case study and write a brief on the hormonal imbalances and their systemic effects in the patient. • Ask students to design an infographic that summarizes key information about a particular endocrine disorder and its pathophysiological mechanisms. <p>4. Peer Learning (Optional):</p> <ul style="list-style-type: none"> • Facilitate a discussion on the differences between hyperthyroidism and hypothyroidism, encouraging students to share insights and questions. • Pair up students to teach each other about the endocrine glands and their disorders, focusing on pathophysiological aspects. • students role-play as patients exhibiting symptoms of different endocrine disorders and have peers guess the condition based on the described symptoms.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP2.1	Interpretation of Hormonal Assay Results	<p>1. Lab Report Interpretation (120 mins):</p> <p>A. Instructor Briefing (10 mins): Provide an overview of the activity and its objectives. Explain the importance of correlating lab results with clinical symptoms for accurate diagnosis of endocrine disorders (e.g., thyroid, pituitary, and adrenal</p>

dysfunction). Distribute simulated or real lab reports, including hormonal assay results for conditions like hypothyroidism, hyperthyroidism, Cushing's syndrome, and Addison's disease.

B. Lab Report Analysis and Interpretation (50 mins):

- Divide students into small groups of 4-5.
- Each group receives a unique case with a lab report, including:
 - Hormonal assay results (e.g., TSH, T3, T4, cortisol, ACTH).
 - Relevant clinical history (e.g., symptoms like fatigue, weight changes, or palpitations).
 - Physical examination findings (e.g., goiter, skin changes, or tremors).
- Groups analyze the lab results, correlate them with the clinical picture, and formulate a differential diagnosis.

C. Group Discussion and Presentation (20 mins):

- Each group presents their case analysis, including:
 - Interpretation of lab results.
 - Differential diagnosis.
 - Suggested next steps (e.g., confirmatory tests, treatment options).
- The instructor moderates the discussion, offering corrections and insights where needed.

D. Peer Feedback and Collaborative Learning (30 mins):

- Groups swap their cases with another group.

		<ul style="list-style-type: none"> • Each group reviews the interpretation and diagnosis provided by their peers, offering constructive feedback. • This encourages critical thinking and collaborative learning. • The instructor reviews selected cases, highlighting correct interpretations, common errors, and critical points for differential diagnosis. <p>E. Quiz on Lab Report Interpretation (20 mins):</p> <ul style="list-style-type: none"> • Distribute short clinical scenarios with corresponding lab reports. • Students answer multiple-choice or short-answer questions, such as: <ul style="list-style-type: none"> ○ Match the lab results to the most likely diagnosis. ○ Identify additional tests required to confirm the diagnosis. • Collect responses and review them as a class, reinforcing key concepts. <p>F. Summary and Reflection (10 mins):</p> <ul style="list-style-type: none"> • Students share key takeaways from the activity. • The instructor provides final clarifications and emphasizes the importance of integrating lab results, clinical symptoms, and examination findings.
NLHP2.2	Clinical Assessment of Amrāḍ-i-Ghudud-i-Daraqiyya (Thyroid Disorders)	<p>Demonstration → Role Play (120 mins) → Simulation</p> <p>1. Demonstration of Physical Examination and Clinical Assessment (40 mins):</p> <p>A. Instructor Demonstration:</p> <ul style="list-style-type: none"> • Inspection: Neck inspection for swelling (goiter), symmetry, and visible nodules.

- **Palpation:** Assess thyroid size, consistency, tenderness, and nodules.
- **Auscultation:** Listening for bruits in cases of suspected Graves' disease.
- **Signs:** Demonstration of identifying clinical signs of hyperthyroidism (e.g., tremors, sweating, exophthalmos) and hypothyroidism (e.g., dry skin, bradycardia, slow reflexes).

B. Guided Student Practice:

- Students practice these techniques in pairs or small groups under instructor supervision.
- The instructor observes and provides immediate feedback on technique and accuracy.

2. Role Play for Patient History Taking and Communication (40 mins):

A. Role Play Setup: One student plays the role of the doctor, and another plays the patient with symptoms suggestive of thyroid dysfunction (cases include hyperthyroidism, hypothyroidism, or thyroiditis). Provide students with patient case details (symptoms such as weight changes, fatigue, or palpitations).

B. Role Play Execution:

- The "doctor" asks focused questions related to thyroid function (e.g., changes in energy, heat/cold tolerance, heart rate) and gathers relevant medical history (e.g., family history, medications, stress/infections).
- Emphasize empathetic communication and addressing patient concerns.

C. Discussion and Feedback: The instructor and peers provide feedback on the quality of history taking, exploration of thyroid-related symptoms, and patient communication.

		<p>3. Clinical Case Simulation for Interpretation and Diagnosis (40 mins)</p> <p>A. Scenario Presentation: Provide students with a standardized patient case or simulated electronic medical record (EMR) that includes:</p> <ul style="list-style-type: none"> • History: Symptoms like fatigue, heat/cold intolerance, or palpitations. • Physical Exam Findings: E.g., goiter, tremors, dry skin. • Lab Results: TSH, T3, T4 levels, or imaging findings. <p>B. Activity: Students perform the following:</p> <ul style="list-style-type: none"> • Summarize clinical findings from the case. • Correlate symptoms, examination findings, and lab results. • Formulate a provisional diagnosis (e.g., hypothyroidism, hyperthyroidism, Graves' disease). • Explain the diagnosis to the patient (played by a peer or instructor). • Discuss next steps (e.g., confirmatory tests, imaging, or referral). <p>C. Debrief and Feedback:</p> <ul style="list-style-type: none"> • The instructor provides feedback on students' ability to integrate history, clinical findings, and labs into a coherent diagnosis. • Highlight strengths and areas for improvement in clinical reasoning and communication.
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Topic 3 امراض نقص استقلاب Amrāḍ-i-Naqṣ-i-Istihāla (Metabolic Disorders) (LH : 4, NLHT: 5, NLHP: 12 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Identify and describe the key types of metabolic disorders, classifying them into relevant categories based on their	CK	MK	K	L&PPT , L	QZ , PUZ, T- CS	F&S	1	-	LH

	underlying biochemical and clinical characteristics while recognizing the clinical signs and symptoms associated with Diabetes Mellitus, Hyperlipidemia, and Obesity.									
CO1	Distinguish the key causes and risk factors of metabolic disorders, with an emphasis on their implications for prevention and management.	CC	MK	KH	L, L&PPT	PRN, T-CS, M-POS	F&S	1	-	LH
CO1	Describe the pathophysiological mechanisms underlying common Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders), including diabetes mellitus, hyperlipidemia, obesity and focusing on how these mechanisms contribute to clinical symptoms.	CC	DK	KH	CBL, PL, SDL	CL-PR, CR-RED, PA	F&S	1	-	NLHT3.1
CO3	Analyze the laboratory investigations used in the diagnosis of Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders), including blood glucose levels, lipid profiles, and enzyme assays, and interpret their significance in clinical practice.	CAN	MK	KH	CBL, DIS, PBL	CBA, T-CS	F&S	1	-	NLHT3.2
CO1, CO5	Identify the complications associated with Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) specifically Diabetes Mellitus, including cardiovascular disease, neuropathy, and kidney damage, sleep apnea and propose preventive measures and management approaches.	CC	MK	KH	CBL, DIS, RP	CL-PR, CR-RED, M-POS	F&S	1	-	NLHT3.3
CO1	Explain the concept of Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) in Unani medicine with a focus on managing this condition with Unani principles of treatment including Lifestyle modifications, 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Tadbīr, 'Ilāj bi'l Dawā'.	CC	MK	KH	L&PPT, L	Log book, T-CS, DEB, S-LAQ, CR-RED	F&S	1	-	LH

CO1	Enumerate the Ma'mulāt-i-Maṭab for Dhayābītus al-Sakrī (Diabetes Mellitus), Amrāḍ-i- Nuqṣ-i-Istihāla-i-Shaḥm (Lipid Metabolism Disorders), Siman Mufriṭ (Obesity).	CK	DK	KH	LS	COM, CL-PR, VV-Viva	F&S	1	-	NLHT3.4
CO3	Calculate BMI and measure anthropometric parameters in patients to assess their risk of Siman Mufriṭ (Obesity) and metabolic syndrome. Utilize and interpret OPD diagnostic tools such as Bioelectrical Impedance Analysis (BIA), skinfold calipers, digital weighing scales with body composition analyzers, and CARA scan for a comprehensive obesity assessment.	PSY-MEC	MK	D	D, PBL	CBA, OSCE, P-PRF, DOPS, DOPS	F&S	1	-	NLHP3.1
CO3	Demonstrate the ability to accurately interpret lipid profile tests to assess a patient's risk of cardiovascular disease and metabolic disorders, focusing on the analysis of various lipid parameters such as total cholesterol, LDL, HDL, and triglycerides.	PSY-GUD	MK	SH	D, DIS, CBL	CBA, P-EXAM, P-VIVA	F&S	1	-	NLHP3.2
CO3	Demonstrate the ability to accurately interpret results from various laboratory tests for blood glucose, including fasting blood glucose, oral glucose tolerance tests, and hemoglobin A1c, and apply this understanding in assessing and managing patients.	PSY-GUD	MK	SH	CBL	Mini-CEX, CBA, P-VIVA	F&S	1	-	NLHP3.3
CO1, CO5	Demonstrate the ability to provide personalized dietary advice to patients with diabetes mellitus, hyperlipidemia, and obesity based on the principles of Unani Medicine.	PSY-GUD	MK	SH	PBL	P-VIVA, CBA, Mini-CEX	F&S	1	H-IBT	NLHP3.4
CO3	Demonstrate the ability to perform a comprehensive assessment of patients with sleep apnea syndrome, including the identification of clinical features, risk factors,	PSY-GUD	DK	SH	CBL	DOAP, OSCE, CHK	F&S	1	-	NLHP3.5

	and appropriate management strategies based on Unani medicine principles.									
CO3	Demonstrate the ability to accurately diagnose hyperglycemic hyperosmolar state (HHS) by interpreting clinical signs, symptoms, and laboratory findings.	PSY-SET	MK	SH	CBL, LRI, DIS, RP	PA, P-VIVA, OSCE, QZ	F&S	1	-	NLHP3.6

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT3.1	Pathophysiological mechanisms of Amrād-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)	<p>1. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> Provide a brief overview of the activity. Share learning objectives and emphasize the importance of understanding the pathophysiology of metabolic disorders. Distribute one clinical case for each group (cases focus on diabetes mellitus, hyperlipidemia, and obesity). Example cases: <ul style="list-style-type: none"> Diabetes Mellitus: A 50-year-old male with polyuria, polydipsia, and weight loss. Hyperlipidemia: A 45-year-old female with xanthomas and a family history of cardiovascular disease. Obesity: A 35-year-old male with fatigue, joint pain, and BMI >30. In small groups (4-5 students), analyze the assigned case and answer guided questions: <ol style="list-style-type: none"> What are the clinical symptoms in the case? What could be the underlying pathophysiological mechanisms? How do these mechanisms contribute to the clinical presentation? Groups collaborate to outline their findings on a chart or digital tool.

- Each group presents their case analysis in 5 minutes. Focus on explaining the pathophysiological mechanisms and linking them to symptoms.
- Facilitator summarizes the key points from each group. Highlight commonalities and differences in the pathophysiological mechanisms among the disorders. Provide additional insights or address misconceptions.

2. Self-Directed Learning (Optional):

- Ask students to conduct independent research on a specific metabolic disorder using reliable resources.
- Ask students to create a concept map illustrating the pathophysiological mechanisms and their clinical symptoms.
- Then ask students to write a reflective summary of insights gained from the research.
- Ask students to develop a detailed infographic summarizing key concepts of a chosen metabolic disorder.

3. Peer Learning (Optional):

- Encourage students to form small study groups to discuss findings and clarify concepts related to metabolic disorders, fostering collaborative learning.
- Facilitate informal presentations among students, followed by Q&A sessions to share insights on different metabolic disorders, promoting engagement and critical thinking.
- Incorporate role-playing scenarios in your lessons to allow students to apply their knowledge practically in diagnosing metabolic disorders, enhancing their clinical reasoning skills.

		<ul style="list-style-type: none"> • After presentations, conduct feedback sessions to help students refine their understanding and encourage collaborative learning among peers.
NLHT3.2	Laboratory Investigations in Amrāḍ-i-Naqṣ-i-Istihāla (Metabolic Disorders)	<p>Any one of the given activities:</p> <p>1. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Briefly introduce the objectives and distribute clinical cases. • Students work in small groups (4–5 members). • Analyze clinical cases with specific lab results (e.g., blood glucose, lipid profiles). • Identify the metabolic disorder and link laboratory findings to the patient's symptoms and history. • Each group presents their findings (5 minutes per group). • Focus on peer-to-peer learning and cross-discussion. • Instructor summarizes the key learning points. <p>2. Problem-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Explain the PBL approach and form small groups. • Provide each group with a clinical scenario involving symptoms of a metabolic disorder. • Groups identify the necessary laboratory investigations and interpret the results. • Encourage students to briefly research the implications of abnormal findings. • Groups share their findings and suggest diagnostic steps or management plans (5 minutes per group). • Instructor moderates and provides clarifications.

		<ul style="list-style-type: none"> Summarize findings and address unanswered queries. <p>3. Structured Group Discussion (60 mins):</p> <ul style="list-style-type: none"> Divide students into groups and assign each group a specific laboratory investigation (e.g., blood glucose, lipid profile). Groups discuss the significance, limitations, and clinical relevance of their assigned investigation. Prepare a short summary. Groups role-play as physicians explaining test results to a "patient" (other group members). Each role-play lasts 5 minutes, followed by brief feedback. Instructor highlights the importance of clear communication and summarizes the clinical relevance of the tests discussed.
NLHT3.3	Complications of Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)	<p>Any one of the given activities:</p> <p>1. Discussions (60 mins):</p> <ul style="list-style-type: none"> Divide the class into small groups and assign each group a specific complication of metabolic disorders (e.g., diabetic nephropathy, cardiovascular disease in obesity). Each group explores the assigned complication, focusing on its pathophysiology, impact on patients, and preventive measures. Groups create a short summary or visual aid (e.g., flowchart or poster). Each group presents their findings (5 minutes per group). Other groups ask questions to deepen understanding. Instructor summarizes the discussion, emphasizing key points and preventive strategies.

		<p>2. Role-Playing (60 mins):</p> <ul style="list-style-type: none"> • Assign roles to students (e.g., healthcare provider, patient, caregiver). Provide a brief clinical scenario (e.g., a patient with diabetic foot complications). • Groups enact scenarios focusing on patient-provider communication, discussing complications and management strategies. • Each role-play lasts 5 minutes, followed by 2 minutes of group feedback. • Groups discuss the challenges they faced and what they learned. • Instructor emphasizes best practices in communication and teamwork. • Summarize the role-playing outcomes and highlight key insights. <p>3. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Provide clinical cases related to metabolic disorders and their complications (e.g., a patient with obesity and obstructive sleep apnea). • Groups analyze the cases, identify complications, and discuss proposed management strategies. • Groups prepare a brief presentation or report. • Groups present their findings (5 minutes per group). • Peers and instructors ask questions to refine the analysis. • Instructor emphasizes the critical points from all cases.
NLHT3.4	<p>Ma'mulāt-i-Maṭab for Amrāḍ-i-Naqṣ-i-Istihāla (Metabolic Disorders)</p>	<p>1. Library Session (60 mins):</p> <p>A. Literature Review:</p> <ul style="list-style-type: none"> • Students search for scholarly articles and classical Unani texts on the treatment of metabolic disorders with Unani medicines. • Focus areas include key single drugs and formulations.

		<ul style="list-style-type: none">• Students summarize findings in a concise format (e.g., a bullet-point summary or brief notes). <p>B. Case Study Analysis:</p> <ul style="list-style-type: none">• Provide pre-selected case studies from library resources documenting the use of Unani medicines in metabolic disorder management.• Students analyze cases in pairs or small groups, highlighting key insights such as drug effectiveness, clinical outcomes, and pharmacological properties. <p>C. Resource Compilation:</p> <ul style="list-style-type: none">• Groups create a shared list of essential books, journals, and articles related to Unani medicines for metabolic disorders.• This list will serve as a resource guide for future research. <p>D. Presentation Preparation:</p> <ul style="list-style-type: none">• Students, in groups, prepare a 2-minute presentation on a specific <i>Ma'mulā t-i-Maṭab</i> used for metabolic disorders such as Type 2 Diabetes Mellitus, Obesity, or Lipid Metabolism Disorders.• Focus on pharmacological properties, clinical applications, and evidence from library research. <p>E. Discussion: (60 Min)</p> <ul style="list-style-type: none">• Students share findings on different Unani medicines and their roles in managing metabolic disorders.
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		<ul style="list-style-type: none"> The instructor moderates the discussion, ensuring key points are clarified and knowledge is synthesized.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP3.1	Assessment of the risk of Siman Mufriṭ (Obesity)	<p>Demonstration → Problem-Based Learning (120 mins)</p> <p>1. Demonstration: Measuring BMI and Waist-Hip Ratio (60 mins):</p> <p>A. Instructor Demonstration:</p> <ul style="list-style-type: none"> The instructor will demonstrate the correct method for measuring Body Mass Index (BMI) and waist-hip ratio using standard equipment (e.g., weighing scale, measuring tape). The demonstration will be performed on a patient or simulated model, ensuring students can observe the process. Key points of focus: <ul style="list-style-type: none"> How to accurately measure weight, height, and waist/hip circumference. Proper calculation of BMI and waist-hip ratio, along with the interpretation of each. Common errors to avoid during the measurements. <p>B. Student Observation & Note-Taking:</p> <ul style="list-style-type: none"> Students will take notes while observing the demonstration, paying attention to the precision needed for each measurement.

		<ul style="list-style-type: none">• The instructor will emphasize the significance of these metrics in diagnosing obesity and metabolic syndrome. <p>C. Discussion:</p> <ul style="list-style-type: none">• After the demonstration, a discussion will follow to help students understand how BMI and waist-hip ratio contribute to the clinical diagnosis of obesity and metabolic syndrome.• Discussion will include the thresholds for these measurements and how they inform treatment plans for managing metabolic disorders. <p>2. Problem-Based Learning: Clinical Scenario on Metabolic Syndrome (60 mins):</p> <p>A. Scenario Introduction:</p> <ul style="list-style-type: none">• Present students with a hypothetical case of a patient who exhibits symptoms of metabolic syndrome (e.g., obesity, high blood pressure, dyslipidemia, insulin resistance).• Include clinical details such as the patient's history, vital signs, and lab results. <p>B. Group Work: Divide students into small groups (4-6 students per group). Each group works together to:</p> <ul style="list-style-type: none">• Identify how BMI and waist-hip ratio play a role in diagnosing metabolic syndrome.• Discuss how these measurements can contribute to the risk stratification of the patient.
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		<ul style="list-style-type: none"> • Develop a treatment plan based on the patient's BMI and waist-hip ratio, taking into account lifestyle modifications, dietary changes, and pharmacological interventions. <p>C. Group Presentation & Justification: Each group presents their analysis, focusing on:</p> <ul style="list-style-type: none"> • The role of BMI and waist-hip ratio in the diagnosis and management of metabolic syndrome. • Justifications for their treatment plan, citing relevant research or clinical guidelines. <p>D. Class Discussion & Instructor Feedback:</p> <ul style="list-style-type: none"> • The instructor provides feedback on the presentations, highlighting key learning points. • A brief discussion follows on the importance of these measurements and how they impact clinical decision-making in real-world settings.
NLHP3.2	Interpretation of Lipid Profile Results	<p>Demonstration → Case Based Learning → Discussion (120 mins)</p> <p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> • The instructor presents a sample lipid profile report on a projector. • The instructor explains each component (total cholesterol, LDL, HDL, triglycerides), including normal ranges and clinical significance. • The instructor demonstrates how to identify abnormalities and interpret their implications.

		<p>2. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Students receive different patient case scenarios with lipid profile results. • In small groups, students analyze the results, discuss the clinical history of the patients, and determine the risk factors for cardiovascular diseases. • Each group presents their findings to the class, justifying their interpretations based on clinical guidelines. <p>3. Discussion (30 mins):</p> <ul style="list-style-type: none"> • The instructor facilitates a discussion on various lipid profile abnormalities and their clinical implications. • students share their insights from the CBL activity, exploring diverse interpretations and opinions. • The group discusses how lifestyle, diet, and medications can affect lipid levels, with students contributing real-life experiences or research findings.
NLHP3.3	Interpretation of Blood Glucose Laboratory Tests	<p>1. Case-Based Learning (120 mins):</p> <p>A. Introduction: Provide a brief overview of the following:</p> <ul style="list-style-type: none"> • Importance of blood glucose tests in diagnosing and managing diabetes. • Normal ranges for FBG, OGTT, and HbA1c. • Role of these tests in monitoring glycemic control and identifying complications. • Explain the objectives and structure of the case-based learning activity.

B. Case Presentation: Distribute the following case scenarios among groups:

Case 1: A 45-year-old female presents with fatigue, frequent urination, and weight loss. Laboratory results:

- FBG: 136 mg/dL
- OGTT (2-hour post-load): 230 mg/dL
- HbA1c: 8.5%

Case 2: A 55-year-old male with a known history of Type 2 diabetes presents for routine follow-up. Laboratory results:

- FBG: 110 mg/dL
- OGTT: 160 mg/dL
- HbA1c: 7.2%

Case 3: A 30-year-old pregnant woman (G2P1) with a family history of diabetes is undergoing screening for gestational diabetes. Laboratory results:

- FBG: 98 mg/dL
- OGTT (1-hour post-load): 165 mg/dL
- HbA1c: 5.6%

C. Group Activity (60 minutes): Divide students into three groups, assigning one case to each group. Provide a worksheet to guide their analysis:

Worksheet Tasks:

I. Interpretation of Lab Results:

- Compare results with normal ranges for FBG, OGTT, and HbA1c.

- Classify the patient's glycemic status (e.g., normal, prediabetes, diabetes).

II. Correlation with Clinical Features: Discuss how the lab results align with the patient's symptoms or history.

III. Management Plan: Propose a management strategy tailored to the patient, including:

- Dietary advice (Ilaj-bil-Ghiza).
- Lifestyle modifications.
- Discuss the potential Mizaj (temperament) imbalance.
- Suggest Unani therapies (Ilaj-bil-Dawa or Tadbeer) for glycemic control.

IV. Facilitator Role:

- Observe group discussions and provide guidance.
- Ask probing questions to encourage critical thinking, e.g.:
 - "What does the HbA1c value tell us about long-term glycemic control?"
 - "What lifestyle changes would you prioritize for this patient?"

D. Group Presentations: Each group presents their case analysis and management plan to the class. Facilitator encourages questions and discussion from peers.

E. Facilitator Feedback and Discussion:

- Summarize the interpretations of lab results for each case.
- Highlight the importance of integrating clinical and laboratory findings for patient care.

		<ul style="list-style-type: none"> • Provide feedback on group presentations and address any misconceptions. <p>F. Conclusion and Q&A:</p> <ul style="list-style-type: none"> • Reiterate the significance of FBG, OGTT, and HbA1c in diagnosing and managing diabetes. • Allow students to ask questions and clarify doubts.
NLHP3.4	<p>Dietary Management for Patients with Diabetes, Hyperlipidemia, and Obesity Based on Unani Medicine Principles</p>	<p>1. Problem-Based Learning (120 mins):</p> <p>A. Introduction: Briefly introduce the role of Ilaj-bil-Ghiza (dietary therapy) in managing metabolic disorders in Unani medicine.</p> <ul style="list-style-type: none"> • Highlight the importance of aligning dietary advice with Mizaj (temperament) and lifestyle modifications. • Explain the PBL process and the expectations from students during the session. <p>B. Case Presentation: Present three patient cases (written or oral) for group discussion. Each group will focus on one case:</p> <p>Case 1: Diabetes Mellitus A 50-year-old male presents with excessive thirst, frequent urination, and fatigue. He has a Balghami Mizaj and consumes refined sugars and cold foods frequently. His fasting blood sugar is 180 mg/dL, and his BMI is 27.</p> <p>Case 2: Hyperlipidemia A 45-year-old female presents with fatigue and heaviness after meals. Her lipid</p>

profile shows elevated LDL and triglycerides. She has a Damwi Mizaj and consumes high-fat and fried foods regularly.

Case 3: Obesity

A 38-year-old male with a sedentary lifestyle presents with shortness of breath and knee pain. His BMI is 34, and his Mizaj is Balghami. He reports overeating and a preference for sweets.

C. Group Activity:

- Divide students into **three groups** and assign one case to each group.
- Provide a structured worksheet to guide their problem-solving process:

Worksheet Tasks:

1. Identify key clinical features and dietary risk factors from the patient's history.
 2. Analyze the patient's Mizaj and its role in the disorder.
 3. Recommend personalized dietary advice, including:
 - Foods to encourage based on Mizaj and condition.
 - Foods to avoid that may worsen the condition.
 - Suggested meal timings and portions.
 4. Suggest additional lifestyle modifications to support dietary advice.
- **Facilitator Role:** Guide groups with probing questions, such as:
 - "How does the Mizaj affect the patient's condition?"
 - "What foods can balance the Mizaj and manage symptoms?"
 - Clarify doubts and ensure all groups stay focused on the problem.

D. Group Presentations:

		<ul style="list-style-type: none"> • Each group presents their findings and dietary recommendations to the class. • Encourage peer-to-peer feedback and discussion. • Facilitator moderates and provides additional insights or corrections. <p>E. Conclusion and Feedback: Summarize key takeaways from the session, including:</p> <ul style="list-style-type: none"> • The relationship between Mizaj and dietary management in Unani medicine. • Best practices in providing personalized dietary advice. • Collect feedback from students on their problem-solving experience.
NLHP3.5	Assessment and Management of Sleep Apnea Syndrome	<p>1. Case-Based Learning (120 mins):</p> <p>A. Introduction: Instructor presents a brief introduction of Sleep Apnea Syndrome including its definition, pathophysiology, and clinical features. Explains the role of Mizaj, humoral imbalance and Asbab-e-Sitta Zarooriya in Unani medicine. Brief the purpose and process of the case-based learning activity.</p> <p>B. Case Presentation: Present the real or simulated case scenario such as A 40-year-old male patient complains of loud snoring, waking up multiple times during the night, and feeling excessively tired during the day. He has been gaining weight over the past two years and has a sedentary lifestyle. He often consumes heavy, late-night meals. On examination, his BMI is 32, and his Mizaj is predominantly Barid wa Ratab.</p> <p>C. Group Activity:</p> <ul style="list-style-type: none"> • Divide students into small groups (4-5 students per group).

		<ul style="list-style-type: none"> • Provide each group with a worksheet to guide their analysis of the case: <p>Worksheet Questions:</p> <ul style="list-style-type: none"> • Identify key clinical features and risk factors in the patient's history and examination. • Analyze the patient's condition based on Unani principles (e.g., Mizaj evaluation and Asbab-e-Sitta Zarooriya). • Propose a comprehensive management plan, including: Ilaj-bil-Tadbeer, Ilaj-bil-Dawa, Ilaj-bil-Ghiza <p>D. Group Presentations:</p> <ul style="list-style-type: none"> • Each group presents their findings and proposed management plan to the class. • Encourage peer-to-peer questions and discussion during presentations. <p>E. Instructor Feedback and Discussion:</p> <ul style="list-style-type: none"> • Summarize key points from each group's presentation. • Provide constructive feedback on their clinical reasoning and application of Unani principles. • Highlight best practices and address any misconceptions.
NLHP3.6	Diagnosis of Hyperglycemic Hyperosmolar State (HHS)	<p>Any one of the given activities:</p> <p>1. Case-Based Learning + Discussions (120 mins)</p> <p>A. Case-Based Learning:</p> <ul style="list-style-type: none"> • Divide the class into small groups (4-6 students per group).

		<ul style="list-style-type: none">• Provide each group with a detailed clinical case study on HHS, including: Patient history, Symptoms, Laboratory findings (e.g., glucose levels, osmolality, electrolyte levels). <p>B. Case Analysis:</p> <ul style="list-style-type: none">• Groups analyze the case to identify key diagnostic features of HHS.• Discuss differentiating HHS from DKA.• Suggest initial treatment priorities. <p>C. Group Presentations: Each group presents their findings to the class, focusing on the diagnostic criteria, clinical features, and proposed treatment strategies.</p> <p>D. Discussions: Facilitate a guided discussion, encouraging students to:</p> <ul style="list-style-type: none">• Explore the pathophysiology of HHS and its clinical implications.• Discuss management strategies, including fluid replacement, electrolyte correction, and glucose monitoring.• Reflect on how the diagnostic criteria help in guiding treatment.• Use the Socratic method to pose challenging questions and stimulate deeper thinking.• Encourage students to share thoughts on challenges in HHS management and how they would address them in practice. <p>2. Simulation Exercise + Lab Report Interpretation (120 mins)</p> <p>A. Simulation Exercise: Use a simulated patient or mannequin with pre-set vital signs and clinical features indicative of HHS. Assign roles (e.g., physician, nurse, lab technician). Brief the students on the scenario.</p>
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		<p>B. Simulation:</p> <ul style="list-style-type: none"> • Students interact with the simulated patient, perform a physical exam, and interpret vital signs and lab results. • Develop and implement a treatment plan. <p>C. Debriefing: Review the simulation, emphasizing what was done well and areas for improvement. Discuss key clinical takeaways, focusing on stabilization and management of HHS</p> <p>D. Lab Report Interpretation:</p> <ul style="list-style-type: none"> • Provide pre-prepared lab reports (e.g., glucose levels, osmolality, and electrolytes) from HHS patients. • Students, in pairs or small groups, interpret the lab results to confirm the diagnosis. • Identify abnormalities and correlate them with clinical signs and symptoms. • Groups share their findings. • Instructor explains the clinical significance of each lab result and how it informs the treatment plan.
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Topic 4 امراض توراث Amrāḍ-i-Tūrāth (Genetic Disorders) (LH : 1, NLHT: 1, NLHP: 0 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe the key principles of Amrāḍ-i-Tūrāth (Genetic Disorders), including their types, inheritance patterns, and common examples, while classifying them into major categories such as single-gene disorders, chromosomal abnormalities, and multifactorial disorders.	CK	MK	K	L&PPT , L&GD, L, L_VC	M-CHT, QZ , T-OBT, PUZ	F&S	1	-	LH

CO3	Identify the clinical features of common Amrāḍ-i-Tūrāth (Genetic Disorders), such as Cystic Fibrosis, and Huntington's disease, Marfan Syndrome, etc and explain the diagnostic techniques, including genetic testing methods, along with the interpretation of their results.	CC	DK	KH	PL, FC, SDL	CL-PR, VV-Viva, PA	F&S	1	-	NLHT4.1
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT4.1	Clinical features of common Amrāḍ-i-Tūrāth (Genetic Disorders)	<p>1. Flipped Classroom (60 mins for in-Class activity):</p> <p>Phase 1: Pre-Class Preparation: Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, diagnostic criteria, treatment protocols)</p> <p>Phase 2: In-Class Discussion (Flipped Session):</p> <ul style="list-style-type: none"> • Instructor clarifies key concepts and addresses questions arising from the pre-class materials. • Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> ○ Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. ○ Groups present their findings and discuss different approaches to solving problems. • Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>2. Self-Directed Learning (Optional):</p>

		<ul style="list-style-type: none"> Students independently explore genetic disorders and diagnostic techniques, which can be reinforced through follow-up discussions or assessments. <p>3. Peer Learning (Optional):</p> <ul style="list-style-type: none"> Collaborative group work where students can discuss and teach each other about clinical features and diagnostic methods of genetic disorders.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
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Topic 5 Nervous System Part 1: عسرأسودآ' (Headache) (LH : 1, NLHT: 1, NLHP: 2 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Explain Şudā' and its types, including organic and non-organic headaches, with emphasis on etiopathogenesis, triggers, characteristics, and clinical presentations of Şaqīqa (migraine). Describe management principles and treatment strategies for headaches during and after attacks, and list differential diagnoses for Şaqīqa, distinguishing it from other headache disorders.	CK	MK	K	L&PPT, L, L_VC	T-CS, VV-Viva, CHK, QZ	F&S	2	-	LH
CO4	Recognize warning signs in a patient with a headache that could indicate a serious underlying condition and determine when to refer patients for specialist consultation or further diagnostic workup.	CAP	MK	KH	CBL, PBL, L&GD	PA, SP, VV-Viva, T-CS	F&S	2	-	NLHT5.1
CO3	Demonstrate the ability to accurately interpret diagnostic test results, including CT scans, MRIs, and blood tests,	PSY-GUD	MK	SH	CBL	OSCE, CBA	F&S	2	-	NLHP5.1

related to Şudā' (Headache) patients by analyzing case studies, identifying key findings, and correlating them with clinical presentations.									
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT5.1	Warning Signs & Referral for Şudā' (Headaches)	<p>Lecture & Group Discussion → Case-Based Learning (60 mins)</p> <p>1. Lecture & Group Discussion (30 minutes):</p> <ul style="list-style-type: none"> • Begin with a brief lecture on headache disorders, focusing on warning signs and the importance of timely referrals. • Follow with group discussions where students share their insights on case studies highlighting various headache presentations. <p>2. Case Based Learning (30 minutes):</p> <ul style="list-style-type: none"> • Provide students with real or hypothetical patient cases exhibiting different types of headaches, including both benign and serious conditions. • Guide them to identify warning signs and develop a plan for referral based on clinical findings. <p>3. Problem-Based Learning (Optional):</p> <ul style="list-style-type: none"> • Present students with a complex case involving a patient with headaches. They must identify potential causes, warning signs, and necessary referrals.

		<ul style="list-style-type: none"> • Students work in small groups to research relevant literature, propose management plans, and defend their referral decisions. <p>4. Early Clinical Exposure (Optional):</p> <ul style="list-style-type: none"> • Arrange for students to shadow a healthcare professional in a clinical setting where they can observe patients presenting with headache disorders. • Encourage students to take notes on warning signs they observe and discuss the decision-making process for referrals during debrief sessions.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP5.1	Interpretation of Diagnostic Tests of Ṣudā' (Headache)	<p>1. Case-Based Learning (120 mins)</p> <p>Activity Structure:</p> <p>1. Introduction (10 mins): The instructor will introduce the topic by explaining the different types of headaches (e.g., primary vs. secondary), common clinical presentations, and diagnostic approach. This includes the importance of diagnostic tests such as CT scans, MRIs, and blood tests in evaluating headache patients.</p> <p>2. Case Study Distribution (10 mins): Students will be divided into small groups. Each group will receive a distinct case study that includes: A clinical history (patient's age, symptoms, duration, nature of headache, associated symptoms such as nausea, vomiting, neurological deficits). The results of diagnostic tests (e.g., CT/MRI brain scans, CBC, ESR, CRP, etc.). A brief description of the</p>

patient's history (e.g., hypertension, previous history of migraines, recent trauma, family history of neurological diseases). Case Examples:

1. **Case 1:** A middle-aged woman with recurrent headaches, photophobia, and a normal MRI, but elevated ESR and CRP levels.
2. **Case 2:** A young male with a severe, sudden-onset headache, blurred vision, and abnormal CT findings suggesting a brain tumor.
3. **Case 3:** A hypertensive elderly patient with a headache accompanied by neurological deficits (e.g., weakness, aphasia), and abnormal MRI indicating a stroke.
4. **Case 4:** A patient with a recent history of trauma and headache, with a normal CT scan and CBC, but with slightly elevated ESR.

3. Group Analysis and Interpretation (40 mins): Each group will analyze their assigned case by:

- Interpreting Diagnostic Tests: Reviewing the provided CT/MRI scans, blood tests (e.g., CBC, ESR, CRP), and correlating the results with the patient's clinical presentation.
- Differential Diagnosis: Discussing possible diagnoses based on the diagnostic findings and clinical symptoms (e.g., migraine, tension headache, cluster headache, intracranial hemorrhage, stroke, brain tumor).
- Clinical Correlation: Determining how the diagnostic results align with the patient's symptoms, and how to prioritize different causes based on the clinical context.
- Summary of Findings: The group will prepare a concise summary of their analysis, which will include: The likely diagnosis based on test results and clinical correlation. Recommendations for further testing or management (e.g., follow-up MRIs, neurological consult, management

of secondary headache causes). Treatment strategies based on the possible diagnosis (e.g., acute management for a stroke vs. chronic management for migraines).

4. Group Presentations (30 mins): Each group will present their case to the class. During each presentation, the instructor and other students will ask questions, provide feedback, and challenge the group's analysis to foster discussion and deeper understanding. The presentation should include:

- Clinical history of the patient.
- Diagnostic test results and their interpretation.
- Differential diagnoses and the reasoning behind them.
- Recommended management strategies based on the diagnosis.

5. Class-Wide Discussion (20 mins): After all groups have presented, the instructor will lead a facilitated discussion covering:

- Key diagnostic findings in the interpretation of CT, MRI, and blood tests in headache patients.
- Common misinterpretations of diagnostic tests (e.g., how to differentiate between normal variants in MRI scans and pathological findings).
- How clinical presentation can guide the choice of diagnostic tests.
- The importance of differentiating primary from secondary headaches based on diagnostic findings (e.g., recognizing when a headache is secondary to a more serious condition like stroke or a brain tumor).
- Management strategies for the various diagnoses presented in the cases (e.g., acute treatment for hemorrhage, long-term management for chronic migraines, etc.).

		<p>6. Conclusion (10 mins): The instructor will summarize the key takeaways from the activity, including:</p> <ul style="list-style-type: none"> • The importance of correlating clinical findings with diagnostic tests in headache patients. • The role of CT and MRI in detecting serious conditions like tumors, strokes, or hemorrhages. • The value of laboratory tests like CBC, ESR, and CRP in assessing inflammation or infection. • Recognizing red-flag symptoms that warrant urgent action (e.g., sudden-onset severe headache, neurological deficits). • The role of collaboration and consultation with specialists in managing complex cases.
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Topic 6 Nervous System Part 2: عدوى الجهاز العصبي المركزي Adwī al-Jahāz al-‘Aṣbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis) (LH : 2, NLHT: 1, NLHP: 2 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define and describe Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis), including their types and nomenclature. Emphasize the Asbāb (causes) associated with each type and incorporate modern classification and etiopathogenesis. Recall the clinical presentation and differential diagnosis of the different types of Sarsām and Waram-i-Dimāgh, including the differentiation between Sarsām Ḥaqīqī and Sarsām Ghayr Ḥaqīqī (Meningismus).	CK	MK	K	L_VC, L, L&PPT	T-CS, CHK, VV-Viva, QZ	F&S	2	-	LH
CO1, CO3	Evaluate and explain the diagnostic tests used for Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis), including	CC	MK	KH	PL, SIM, PBL, CBL	T-CS, SP, VV-Viva, PA	F&S	2	-	NLHT6.1

	cerebrospinal fluid (CSF) analysis, imaging studies (such as CT and MRI), and laboratory tests									
CO1	Describe the principles of management and treatment strategies for Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis), including contemporary medical management approaches.	CC	MK	SH	L&GD, L	S-LAQ, PRN, SP	F&S	2	-	LH
CO3	Perform focused clinical examination on a patient suspected of having Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis), effectively identifying key signs and symptoms associated with these conditions.	PSY-MEC	MK	SH	DIS, PER, D, CBL	OSCE, DOPS, CHK, DOPS	F&S	2	-	NLHP6.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT6.1	Diagnostic tests for Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis)	<p>1. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> Present students with detailed case scenarios of patients suspected of having meningitis or encephalitis, including relevant clinical history and examination findings. In small groups, students discuss the appropriate diagnostic tests (CSF analysis, imaging studies, laboratory tests) to confirm the diagnosis. Groups then present their findings to the class, explaining the rationale for selecting each test and interpreting the expected results. <p>2. Problem Based Learning (Optional):</p> <ul style="list-style-type: none"> Divide students into small groups and present them with a clinical problem related to meningitis or encephalitis.

- Students must identify the key diagnostic tests needed to assess the condition, research the tests' significance, and prepare a brief report or presentation on their findings.
- Groups share their conclusions, emphasizing the importance of each diagnostic method in clinical practice.

3. Simulation (Optional):

- Create a simulation environment that mimics a clinical setting where students have to evaluate a patient with suspected meningitis or encephalitis.
- Students perform a mock clinical assessment, decide on necessary diagnostic tests, and present their rationale.
- Use role-playing to simulate interactions with the patient (played by a faculty member) and discuss test outcomes.

4. Peer Learning (Optional):

- Assign students specific diagnostic tests (e.g., CSF analysis, CT scan interpretation) related to meningitis and encephalitis.
- Each student prepares a brief teaching session for their peers, explaining the purpose of the test, how it's performed, and what results may indicate.
- After the presentations, encourage questions and discussions to reinforce understanding among peers.

5. Early Clinical Exposure (Optional):

- Arrange visits to hospitals or outpatient clinics.

		<ul style="list-style-type: none"> • Schedule specific days for students to shadow healthcare professionals in neurology or emergency departments. • Encourage students to observe the assessment process for patients with suspected meningitis or encephalitis. • Allow students to take detailed patient histories under supervision, focusing on: <ul style="list-style-type: none"> • Presenting symptoms (e.g., fever, headache, neck stiffness). • Risk factors (e.g., recent travel, immunocompromised status). • Facilitate opportunities for students to ask open-ended questions to gather comprehensive information. • Conduct debriefing sessions after clinical exposure where students: <ul style="list-style-type: none"> Present the cases they encountered, emphasizing diagnostic tests, Discuss the rationale behind selecting specific tests, Reflect on patient management decisions made by clinicians. • Provide opportunities for students to observe or assist in basic examinations, such as: Neurological assessments (e.g., checking reflexes, coordination), Observing lumbar punctures (if permitted and supervised). • Discuss the significance of findings from these examinations and their relevance to diagnosing meningitis or encephalitis.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP6.1	Clinical Examination of Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis)	<p>Demonstration → Case-Based Learning → Presentations → Discussion (120 mins)</p> <p>1. Demonstration (30 mins):</p>

- The instructor will begin with an overview of Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis), highlighting the clinical features, diagnostic signs, and potential complications of both conditions.
- The instructor will demonstrate the key aspects of the focused clinical examination for meningitis and encephalitis in a mock patient or volunteer:
 - **General examination:** Assessing vital signs (temperature, blood pressure, pulse, respiratory rate), looking for signs of systemic infection, or neurological deterioration.
 - **Neurological examination:** Checking for signs of meningeal irritation (e.g., Brudzinski's sign, Kernig's sign), altered consciousness, cranial nerve deficits, and focal neurological signs.
 - **Special tests:** Demonstrating the use of specialized tests such as the Glasgow Coma Scale (GCS) for assessing consciousness levels, and other clinical tests for detecting increased intracranial pressure or signs of brainstem dysfunction.
- The instructor will pause throughout the demonstration to explain the significance of each finding, its relevance to diagnosing meningitis or encephalitis, and the pathophysiology behind it.

2. Case-Based Learning (60 mins):

- After the demonstration, students will be divided into small groups (3-4 students per group). Each group will receive a case study of a patient suspected of having either Sarsām (Meningitis) or Waram-i-Dimāgh (Encephalitis). The case study will include: Clinical presentation (fever, headache, vomiting, altered mental status, seizures, neck stiffness, etc.), Patient history (e.g., recent infections, travel history, vaccination history,

		<p>or any high-risk exposures), Laboratory and diagnostic findings (e.g., CSF analysis, imaging, blood cultures). The group will be required to:</p> <ul style="list-style-type: none">○ Perform a focused clinical examination on a simulated patient or in their discussion (if using a real patient, under supervised guidance).○ Identify and document the key signs of meningitis or encephalitis in their case study.○ Determine the most likely diagnosis based on clinical findings and propose further investigations or management options. <ul style="list-style-type: none">● Groups will analyze their case and discuss: The differential diagnosis of fever with altered mental status and neurological signs, the key diagnostic signs they need to assess (e.g., Kernig's and Brudzinski's signs for meningitis, altered consciousness, focal deficits for encephalitis), how the clinical findings fit with the suspected condition (Sarsām or Waram-i-Dimāgh). <p>3. Group Presentations (20 mins):</p> <ul style="list-style-type: none">● Each group will present their case analysis and clinical findings to the entire class:● Summarizing the patient's history and clinical signs.● Discussing the key diagnostic features they identified during the examination.● Proposing their diagnostic interpretation and the next steps (e.g., lumbar puncture, brain imaging, blood cultures) for confirming meningitis or encephalitis.● The group will also present possible management strategies based on the findings.
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4. Class-Wide Discussion (15 mins): After all presentations, the instructor will lead a class-wide discussion to:

- Clarify the significance of clinical signs identified during the examination and their relevance in the diagnosis of meningitis and encephalitis.
- Discuss any discrepancies or challenges in interpreting the clinical signs or findings between groups.
- Answer any questions the students have about the clinical examination process.
- Highlight the importance of differential diagnosis and the need for further investigations (e.g., lumbar puncture, imaging studies).
- Discuss the management approach for both conditions, focusing on early recognition, supportive care, and targeted therapy.

5. Conclusion and Debrief (15 mins): The instructor will conclude the activity by summarizing the main points:

- The key signs and symptoms of Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis).
- The clinical examination techniques to identify meningeal irritation and focal neurological deficits.
- The importance of differentiating these two conditions based on clinical and diagnostic findings.
- The next steps in diagnosis and management, such as lumbar puncture, brain imaging, and appropriate treatment.
- Final Reflection: The instructor will encourage students to reflect on the clinical examination process, highlighting the importance of systematic evaluation and early intervention in suspected cases of meningitis and encephalitis.

Topic 7 Nervous System Part 3: اضطرابات العصبية العضلية dīṭarābāt al-'Aṣbīyya 'Aḍliyya (Neuromuscular Disorders) (LH : 4, NLHT: 0, NLHP: 4 hours)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define and describe the different types along with Asbab, pathophysiology, and clinical features of Fālij, Laqwa, Istirkhā', Tashannuj.	CK	MK	K	L&PPT , L_VC, L	QZ , VV- Viva, S-LAQ, CHK	F&S	2	-	LH
CO1, CO3	Discuss the diagnostic approach to Fālij, Laqwa, Istirkhā', Tashannuj emphasizing the use of diagnostic tools such as electromyography (EMG), nerve conduction studies, MRI, and clinical assessments. Also Describe rehabilitation strategies for Fālij, including physical therapy and occupational therapy approaches, grounded in the principles of 'Ilāj bi'l Tadbīr.	CC	MK	KH	L&PPT , L	PRN, VV- Viva, PA, T- CS, SP	F&S	2	-	LH
CO1, CO3	Outline the principles of management and treatment strategies for Fālij and Laqwa, including acute and long-term treatment options with focus on Munḍij/Mushil therapy and 'Ilāj bi'l Taghdiya.	CAP	MK	KH	L, L&GD	Log book, SP, S-LAQ, PRN	F&S	2	-	LH
CO3	Perform focused clinical examination of patients with Laqwa, demonstrating consistent control and coordination in eliciting clinical signs and interpreting the findings	PSY-MEC	MK	SH	PBL, D	DOPS, OSCE, Log book, DOPS, CHK	F&S	2	-	NLHP7.1
CO3	Perform focused clinical examination of patients with Fālij (Hemiplegia), demonstrating consistent control and coordination in eliciting clinical signs and interpreting the findings	PSY-MEC	MK	SH	CBL, D, DIS, PER	DOPS, Log book, DOPS, OSCE, CHK	F&S	2	-	NLHP7.2
Non Lecture Hour Theory										

S.No	Name	Description of Theory Activity
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP7.1	Clinical Examination of Laqwa (Facial Palsy) case	<p>Demonstration → Problem Based Learning (120 mins)</p> <p>1. Demonstration (60 mins):</p> <ul style="list-style-type: none"> • The instructor will demonstrate a focused clinical examination on a real patient or simulated case presenting with facial palsy. The demonstration will include facial muscle function, symmetry, and key neurological signs. • students will learn to evaluate facial nerve impairment through patient history, visual inspection, and muscle strength tests, helping them recognize and document findings effectively. • students take turns to practice. <p>2. Problem-Based Learning (Duration: 60 mins):</p> <ul style="list-style-type: none"> • The instructor introduces the clinical problem: A 55-year-old patient presents to the outpatient department (OPD) with sudden weakness on the right side of their body, along with slurred speech and difficulty swallowing. They have a history of high blood pressure and a prior stroke. • Clinical Question: What clinical signs should be assessed, and what findings suggest a diagnosis of Laqwa (hemiplegia)? How would you interpret these findings in terms of prognosis and management? • Students will be provided with a brief patient history, and clinical details of the case. • Students are divided into small groups (4-5 students per group). • Each group discusses the following questions:

		<ul style="list-style-type: none">○ Step 1: What clinical signs of Laqwa (facial palsy) should you assess for based on the patient history and presenting symptoms?○ Step 2: What is the pathophysiology behind Laqwa (facial palsy)? How does a stroke affect the body's motor functions?○ Step 3: What specific examination techniques should be employed to assess for Laqwa (facial palsy), and what key signs would indicate the involvement of the upper motor neurons?○ Step 4: How would you interpret the clinical findings, and what would be the differential diagnosis based on the patient's presentation?○ Step 5: What would be your management plan for this patient, including initial assessments and treatment options?● Each group collaborates to identify and list the key points under these questions, focusing on the clinical examination process and interpretation of findings.● After the group discussions, each group presents their findings to the class, addressing the five questions in order.● The instructor asks follow-up questions to test the depth of understanding and encourages the class to think critically about different aspects of the case.● The instructor provides feedback on the group presentations, highlighting important clinical findings and discussing areas of improvement.● The instructor concludes by emphasizing the importance of a systematic approach to clinical examination, accurate interpretation of findings, and early intervention in stroke management and rehabilitation.
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		<p>3. Early Clinical Exposure (Optional):</p> <ul style="list-style-type: none"> • Students will be introduced to patients with facial palsy during their early clinical rotations. Under supervision, they will practice focused clinical examinations on actual patients, starting with observation and gradually progressing to performing examinations.
NLHP7.2	<p>Clinical Examination of Fālīj (Hemiplegia) case</p>	<p>Demonstration → Case-Based Learning → Presentation → Discussion (120 mins)</p> <p>1. Demonstration (30 mins): The instructor demonstrates a focused clinical examination for Fālīj (hemiplegia), including the following:</p> <ul style="list-style-type: none"> • Inspection: Checking for asymmetry, muscle wasting, abnormal postures, and abnormal movements. • Palpation: Assessing muscle tone (rigidity or flaccidity). • Muscle Strength Testing: Evaluating upper and lower limb strength. • Cranial Nerve Examination: Assessing facial asymmetry, speech problems, and other signs of brainstem involvement. • Sensory and Reflex Testing: Assessing sensation, deep tendon reflexes, and pathological reflexes (e.g., Babinski sign). • Coordination and Gait Assessment: Testing coordination (e.g., finger-to-nose) and evaluating walking (if appropriate). • The instructor interprets the findings and discusses how to make clinical decisions based on these signs. • After completing the examination, students perform the clinical examination of the patient in their groups. • While the students are working, the instructor will circulate, observe their examination techniques, and provide real-time feedback on their performance. This includes guiding them on how to: Consistently elicit

the correct signs, Correctly interpret clinical findings, Perform coordinated movements during the examination to ensure accuracy and reliability.

2. Case-Based Learning (60 mins):

- After the demonstration, the instructor introduces a clinical case: A 60-year-old male patient presents with sudden weakness in the right arm and leg, slurred speech, and a history of high blood pressure. The patient has difficulty moving the right side of his body and exhibits facial droop on the right side.
- Students are divided into small groups (4-5 students). Each group is provided with the case scenario and instructed to: Perform a focused clinical examination of the patient (simulated by a peer or using mannequins) based on the demonstration. Elicit the clinical signs of hemiplegia. Interpret the findings, considering the possible location of the lesion (e.g., stroke in the right hemisphere of the brain causing left-sided hemiplegia).
- Formulate a preliminary diagnosis and discuss the management plan, including initial investigations (CT scan, MRI, etc.) and treatment strategies (e.g., physiotherapy, speech therapy, rehabilitation).

4. Group Presentations and Discussion (30 mins):

- After the practical session, each group will present their findings to the class. This includes: A brief summary of the clinical examination findings, Interpretation of signs (e.g., muscle weakness, reflex abnormalities), Differential diagnosis (e.g., stroke vs. other neurological disorders), Management plan, including referrals for further investigations and therapies.

										<ul style="list-style-type: none"> The instructor will facilitate a class discussion, asking other groups to share their thoughts and compare findings. The focus will be on the variation of signs and how interpretation can change based on the location of the lesion.
Topic 8 Nervous System Part 4: اضطرابات وعيية الدماغية Idṭarābāt Aw'īya al-Damawīyya al-Dimāghīyya (Cerebrovascular Disorders) (LH : 2, NLHT: 1, NLHP: 6 hours)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe cerebrovascular disorders, including their types and classification. Define stroke, classify its types (including Ischemic Stroke (thrombotic and embolic) and Hemorrhagic Stroke), identify modifiable and non-modifiable risk factors for stroke, including hypertension, diabetes, smoking, hyperlipidemia, and family history.	CK	MK	K	L&PPT , L, L_VC	CHK, S-LAQ, QZ , T-CS, VV-Viva	F&S	2	-	LH
CO1	Describe the clinical manifestations of Sakta (Stroke), including motor, sensory, cognitive, and speech deficits, and the use of the FAST (Face, Arms, Speech, Time) acronym for quick assessment.	CK	MK	K	CBL, SIM, RP	S-LAQ, VV-Viva, QZ , CHK, T-CS	F&S	2	-	NLHT8.1
CO1, CO3	Define Duwār, explain its mechanisms and causes (Asbāb), differentiate between various causes through clinical presentations and history, discuss relevant diagnostic approaches for patients presenting with vertigo, and implement and assess management strategies incorporating appropriate 'Ilāj bi'l Tadbīr regimens.	CK	MK	K	L, L&PPT , L_VC	S-LAQ, T-CS, VV-Viva, CHK, QZ	F&S	2	-	LH
CO3	Demonstrate the ability to interpret diagnostic tests for stroke, including CT scans, MRI, and carotid Doppler studies, to assess the type and extent of the stroke.	PSY-COR	DK	SH	LRI, CBL	CHK, P-VIVA, P-EXAM	F&S	2	-	NLHP8.1

CO3	Perform a comprehensive clinical assessment of a patient presenting with Duwār (Vertigo), including obtaining a detailed patient history and conducting a physical examination	PSY-GUD	MK	SH	D, DIS, PER, CBL	OSCE, CHK, DOPS, Mini-CEX, DOPS	F&S	2	-	NLHP8.2
CO3	Demonstrate the ability to perform and interpret vestibular function tests for patients presenting with Duwār (Vertigo), including the Dix-Hallpike maneuver, head impulse test (HIT), and balance assessments.	PSY-GUD	DK	SH	D, PBL	Mini-CEX, OSCE, DOPS, CHK, DOPS	F&S	2	-	NLHP8.3

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT8.1	Clinical Manifestations of Sakta (Stroke)	<p>Any one of the given activities:</p> <p>1. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> Begin with a stroke case scenario. Divide students into small groups and assign each group a unique case, emphasizing different stroke presentations (e.g., one case could focus on speech deficits, another on motor deficits). Pose open-ended questions to guide students' thought processes, such as: "What symptoms suggest a possible stroke in this case?", "How would you assess each symptom using the FAST acronym?", "What types of deficits might the patient experience (motor, sensory, cognitive, speech)?" Each group works together to analyze the case, identify symptoms, and discuss differential diagnoses. They then apply the FAST acronym to make an initial stroke assessment.

- Groups present their findings to the class, encouraging discussion about the differences and commonalities across cases.

2. Role Play (60 mins):

- Divide students into small groups and assign each person a role. For example: Patient: A student presents with specific stroke symptoms (such as drooping face or slurred speech), Family Member or Bystander: This person must describe the patient's symptoms and answer any assessment questions, Healthcare Provider: Responsible for conducting a FAST assessment, observing physical and speech deficits, and coordinating emergency actions.
- The "healthcare provider" student applies the FAST test and evaluates the patient, asking relevant questions, assessing deficits, and documenting observations.
- After each scenario, hold a group discussion on the assessment's accuracy, areas for improvement, and lessons learned. Discuss how symptoms aligned with expected stroke manifestations and what actions were most effective.

3. Simulation (Optional):

- Set up a simulated hospital or clinic environment. If using mannequins, program them to display symptoms such as arm drift or facial asymmetry. Alternatively, brief standardized patients on their specific symptoms.
- Scenario Introduction: Brief students on the simulation objectives and provide context (e.g., "You are assessing a patient brought to the ER with suspected stroke symptoms").
- Students conduct a thorough assessment using the FAST acronym and examine the patient for motor, sensory, cognitive, and speech deficits.

		<ul style="list-style-type: none"> • Students check for additional stroke signs, such as decreased sensation on one side, slurred speech, or difficulty understanding questions. • They document findings systematically, practice handover techniques, and summarize their observations to an instructor or “senior doctor.” • Following the simulation, students and instructors discuss performance. Encourage students to reflect on their response times, assessment accuracy, and any signs or symptoms they may have missed.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP8.1	Interpretation of diagnostic tests for Sakta (Stroke)	<p>1. Lab Report interpretation (60 mins):</p> <ul style="list-style-type: none"> • Students are provided with real or simulated brain imaging scans (CT, MRI, and carotid Doppler) of patients with stroke. • In small groups, they are guided through the interpretation of the images, identifying the type (ischemic or hemorrhagic) and location of the stroke, and assessing the severity. • Faculty mentors provide immediate feedback on the interpretation. <p>2. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Present students with clinical case scenarios of patients suspected of having a stroke, including imaging results (CT, MRI, and Doppler studies). • Students work in small groups to interpret the diagnostic images and discuss how the imaging results correlate with clinical findings, such as neurological deficits.

		<ul style="list-style-type: none"> • They then formulate a diagnostic conclusion and a management plan based on their interpretations. <p>(Total Duration: 120 mins)</p>
NLHP8.2	<p>Clinical assessment of a patient presenting with Duwār (Vertigo)</p>	<p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> • The instructor demonstrates how to perform a comprehensive physical examination for a vertigo patient, including: Neurological examination (cranial nerves, motor strength, coordination), Gait assessment. • After the demonstration, students take turns practicing these exams under the instructor's supervision. <p>2. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Divide students into small groups and present clinical cases of patients presenting with vertigo. • Each group discusses the case, focusing on gathering patient history, symptomatology, and differential diagnosis. • Encourage students to brainstorm what questions to ask regarding the onset, duration, triggers, and associated symptoms of vertigo <p>3. Group Presentations (20 mins): Each group will present their case study findings to the class.</p> <p>4. Class-Wide Discussion (10 mins): After the group presentations, the instructor will lead a class-wide discussion discuss the findings made by students and address any confusion or questions regarding the clinical assessment.</p>

		<p>5. Conclusion and Wrap-Up (10 mins): The instructor will conclude the activity by summarizing:</p> <ul style="list-style-type: none"> • The key steps in performing clinical assesment • The interpretation of results and how to correlate findings with clinical symptoms. • The importance of accurate diagnosis in managing vertigo. <p>(Total Duration: 120 mins)</p>
NLHP8.3	<p>Vestibular function tests for Duwār (Vertigo)</p>	<p>1. Demonstration (30 mins)</p> <ul style="list-style-type: none"> • The instructor will begin with a brief overview of Duwār (Vertigo), including the types of vertigo (peripheral vs. central), causes, and associated symptoms. • The instructor will demonstrate each of the vestibular function tests for the class: Dix-Hallpike maneuver, Head Impulse Test (HIT), Balance Assessment (e.g., Romberg test, Fukuda stepping test). • After each test, the instructor will explain how to interpret the results. <p>2. Problem-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • After the demonstration, students will be divided into small groups (3-4 students per group). Each group will receive a case study of a patient presenting with vertigo (Duwār). The case will include: Patient history: Duration, onset, triggers, and associated symptoms (e.g., hearing loss, tinnitus, headache), Symptoms: Description of vertigo (e.g., spinning sensation, dizziness, lightheadedness), Clinical signs: Nystagmus, postural instability, and any other relevant findings, Preliminary diagnostic tests: Results from previous assessments or imaging (if any).

- Each group will perform the vestibular function tests on a simulated patient or in discussion using the case study (if using a volunteer patient, it should be under supervision). The group will be asked to:
 - Perform the Dix-Hallpike maneuver, Head Impulse Test (HIT), and balance assessments based on the case scenario.
 - Identify key findings from the tests, documenting any signs of vertigo (e.g., nystagmus, delayed response, abnormal head impulses, balance issues).
 - Correlate these findings with the clinical presentation of vertigo in their case study.
 - Formulate a diagnosis based on the results and recommend appropriate management or further testing.
- Clinical Decision-Making: The group will discuss the differential diagnosis for the vertigo patient, considering conditions like BPPV, Meniere's disease, vestibular neuritis, or central causes of vertigo. They will identify potential causes for the positive or negative findings from the vestibular tests and correlate them with the clinical features.

3. Group Presentations (20 mins): Each group will present their case study findings to the class.

4. Class-Wide Discussion (10 mins): After the group presentations, the instructor will lead a class-wide discussion:

- Clarify the interpretation of vestibular function tests, focusing on how results from the Dix-Hallpike maneuver, HIT, and balance assessments help in differentiating between common causes of vertigo.
- Discuss the differential diagnosis of vertigo and emphasize how vestibular function tests guide management strategies.

		<ul style="list-style-type: none"> Address any confusion or questions regarding the interpretation of the tests and clinical decision-making in vertigo cases. <p>5. Conclusion and Wrap-Up (10 mins): The instructor will conclude the activity by summarizing:</p> <ul style="list-style-type: none"> The key steps in performing vestibular function tests (Dix-Hallpike maneuver, HIT, balance assessments). The interpretation of results and how to correlate findings with clinical symptoms. The importance of accurate diagnosis in managing vertigo, including the role of vestibular function tests in clinical decision-making. Final Reflection: The instructor will encourage students to reflect on the clinical application of these tests, emphasizing their role in diagnosing and managing vertigo, and encourage them to practice these tests in their clinical settings for further skill development. <p>(Total Duration: 120 mins)</p>
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Topic 9 Nervous System Part 5: حالات الوعي المتغيرة; Hālāt al-Wa'iyya al-Mutaghiyyra (Altered state of Consciousness) (LH : 1, NLHT: 2, NLHP: 4 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Describe the altered conscious state, identify its types, and classify it based on underlying causes and clinical presentation. Explain the concept of Subāt, including its definition, classification, and underlying causes. Identify the clinical features. Describe coma, differentiate it from other altered states of consciousness, classify the causes of coma, and identify the clinical features associated with each cause.	CK	MK	K	L, L_VC, L&PPT	S-LAQ, T-CS, VV-Viva, QZ	F&S	2	-	LH

CO3	Describe the diagnostic approach to evaluating a patient in a coma including clinical history and physical examination, neurological assessment (e.g., Glasgow Coma Scale), relevant investigations (e.g., imaging studies, blood tests, lumbar puncture).	CAP	MK	KH	PBL, FC, SIM, CBL	M-POS, PRN, T-CS	F&S	2	-	NLHT9.1
CO3	Discuss the initial management strategies for coma, including airway protection, stabilization of vital signs, and addressing reversible causes.	CC	MK	KH	FC, CBL, SIM, PBL	T-CS, PRN, M-POS	F&S	2	-	NLHT9.2
CO2, CO6	Demonstrate sensitivity to the ethical considerations involved in the management of coma, including end-of-life decisions, advanced directives, and effective communication with the family.	AFT-VAL	DK	SH	SIM, CBL, RP	PA, SBA, INT	F&S	2	-	NLHP9.1
CO3	Demonstrate the ability to interpret diagnostic tests in coma patients, such as CT scans, MRI, EEG, and blood tests.	PSY-MEC	DK	SH	CBL, LRI	P-EXAM, P-VIVA	F&S	2	-	NLHP9.2

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT9.1	Diagnostic approach to a patient in Coma	<p>Any of the given activities:</p> <p>1. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Divide students into small groups and provide each group with a clinical case of a patient in a coma. • Each group will collaboratively analyze the case, focusing on gathering clinical history, performing physical and neurological examinations, and determining relevant investigations. • Ask them to develop a diagnostic approach based on their discussions and prepare to present their findings.

		<ul style="list-style-type: none">• Facilitate peer-to-peer learning by rotating groups to present and critique each other's diagnostic approaches. <p>2. Flipped Classroom (In class: 60 mins):</p> <ul style="list-style-type: none">• Assign pre-reading materials (e.g., journal articles, textbook chapters) and videos on coma evaluation for students to review on their own time.• During non-lecture hours, have students apply their knowledge in interactive group discussions and practical exercises.• Focus on key elements like the Glasgow Coma Scale, physical examination, and interpretation of investigations during the in-person or virtual session. Encourage students to solve case-based problems. <p>3. Problem-Based Learning (60 mins):</p> <ul style="list-style-type: none">• Provide a complex clinical scenario of a comatose patient, presenting in progressive steps (e.g., initial presentation, investigation results).• Allow students to work in teams, identifying key learning issues (e.g., potential causes of coma, investigations to order) and researching independently.• Each group presents their diagnostic approach, fostering peer learning, and engages in problem-solving discussions with the facilitator guiding the learning process. <p>4. Simulation (Optional):</p> <ul style="list-style-type: none">• Use mannequins or standardized patients to simulate different levels of altered consciousness (e.g., stupor, coma) and clinical scenarios.
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		<ul style="list-style-type: none"> • Assign students roles (e.g., physician, family member) to work through the diagnostic approach, from history-taking to performing the Glasgow Coma Scale. • Provide immediate feedback on their performance, helping them refine practical skills such as neurological assessment and communication with family members.
NLHT9.2	Initial management of Coma	<p>Any one of the given activities:</p> <p>1. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Present a clinical scenario of a patient arriving at the emergency department in a coma. • Divide students into small groups to discuss the initial steps in managing the patient, focusing on airway protection, vital sign stabilization, and identifying reversible causes (e.g., hypoglycemia, opioid overdose, trauma). • Guide students to create a stepwise management plan that includes securing the airway (e.g., intubation), stabilizing blood pressure and oxygenation, and performing bedside diagnostics like glucose checks. • Each group presents their approach, followed by a class discussion to compare and contrast strategies. <p>2. Flipped Classroom (In class: 60 mins):</p> <ul style="list-style-type: none"> • Assign students pre-reading materials (e.g., articles or videos) covering the management strategies for coma, including airway management techniques, pharmacological interventions, and identifying reversible causes.

- During the non-lecture session, students work in small groups to apply the knowledge they've gained from pre-class preparation to solve clinical cases.
- Focus group discussions on critical elements like when to intubate, how to stabilize hemodynamics, and which investigations should be performed to find reversible causes.
- Encourage students to come prepared with questions, fostering active, student-driven discussions.

3. Problem Based Learning (60 mins):

- Present a complex case of a patient in a coma with unclear etiology (e.g., trauma, poisoning, or metabolic disturbance).
- Have students identify learning issues related to airway management, stabilization of vital signs, and reversible causes.
- Students research these topics independently and bring their findings to the group to develop a management strategy for the case.
- The facilitator guides the discussion, helping students synthesize their learning into a coherent management plan.

4. Simulation (Optional):

- Conduct a high-fidelity simulation using mannequins or standardized patients to represent a patient in a coma.
- Students work in teams to perform ABCs (Airway, Breathing, Circulation) assessment and management, including:
 - Airway protection (e.g., endotracheal intubation or airway adjuncts).
 - Stabilizing vital signs using IV fluids, oxygen therapy, or medications.
 - Identifying and addressing reversible causes (e.g., administering naloxone for opioid overdose or glucose for hypoglycemia).

		<ul style="list-style-type: none"> After the simulation, facilitate a debriefing session where students reflect on their actions, decision-making process, and areas for improvement.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP9.1	Ethical considerations in the management of Coma	<p>1. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> Present students with a detailed case study involving a coma patient, including medical history, family dynamics, and ethical dilemmas (e.g., advanced directives). In small groups, students analyze the case, identifying ethical considerations and discussing potential management strategies. Encourage students to use ethical principles (e.g., autonomy, beneficence, non-maleficence) to guide their discussions and decision-making. Each group presents their case analysis and management plan, followed by a class discussion to critique and reflect on different viewpoints. <p>2. Role Play Activity (60 mins):</p> <ul style="list-style-type: none"> Divide students into groups and assign roles: healthcare providers, family members, and the coma patient (represented through a case scenario). Each group is given a specific ethical dilemma related to the management of a coma patient, such as whether to continue life support or follow advanced directives. Students must role-play the scenario, focusing on effective communication, empathy, and ethical considerations.

		<ul style="list-style-type: none"> • After the role play, groups present their scenarios and discuss the decisions made, exploring alternative approaches and ethical implications. <p>(Total Duration: 120 mins)</p> <p>3.Simulation (Optional):</p> <ul style="list-style-type: none"> • Create a simulated environment with a standardized coma patient. • Provide students with a case where they must assess the patient's condition and discuss treatment options. • Include elements such as end-of-life decisions, advanced directives, and family involvement. • Students must engage in discussions and make decisions based on ethical frameworks, documenting their thought processes and justifications. • Debrief as a class afterward to discuss different perspectives and decision-making processes.
NLHP9.2	Diagnostic Interpretation in Coma	<p>1. Lab Report Interpretations (60 mins):</p> <ul style="list-style-type: none"> • Familiarize students with lab report components (blood tests, imaging studies, EEGs) through a lecture on terminology and normal vs. abnormal values, followed by distributing sample lab reports. • Enable group analysis of anonymized lab reports, where groups identify key findings and correlate results with potential coma causes. • Enhance interpretation skills through instructor-led discussions, analyzing a complex lab report as a class and discussing the implications of findings.

		<ul style="list-style-type: none"> Apply lab report interpretation to clinical scenarios by presenting case studies with lab reports, allowing students to interpret findings and formulate differential diagnoses. Assess independent interpretation skills with a timed exam consisting of various lab reports, followed by feedback sessions to discuss performance. Encourage self-assessment by having students write reflections on their learning experiences and strategies for improvement. <p>2. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> Present case studies of coma patients, including their diagnostic test results and clinical histories. Ask students to analyze the information, interpret the tests, and propose possible causes of coma. Hold a class discussion to allow students to present their findings and reasoning, fostering collaborative learning. <p>(Total Duration: 120 mins)</p>
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Topic 10 Nervous System Part 6: اضطرابات المعرفة (Idṭarābāt al-Ma'rfiyya (Cognitive Disorders)) (LH : 3, NLHT: 1, NLHP: 0 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Define cognitive disorders and classify them based on clinical presentation and etiology. Define Alzheimer's disease and explain its pathophysiology. Identify the risk factors. Recognize and differentiate the clinical features of Alzheimer's disease from other forms of dementia, and explain the stages of Alzheimer's disease along with the progression of symptoms associated with each stage.	CK	MK	K	L_VC, L, L&PPT	T-CS, QZ, VV-Viva, CHK	F&S	2	-	LH

CO1, CO3	Outline the diagnostic criteria for Alzheimer's disease, including cognitive assessments (e.g., Mini-Mental State Examination) and neuroimaging techniques. Discuss the importance of a comprehensive history and physical examination in confirming the diagnosis.	CC	MK	KH	L&PPT	VV-Viva, QZ, S-LAQ, CHK, T-CS	F&S	2	-	LH
CO1, CO3	Describe the concept of Nisyān in Unani medicine, identify its types based on causes and symptoms, and explain the contemporary classifications of amnesia, including anterograde and retrograde amnesia, along with potential causes and assessment methods.	CK	MK	K	L, L&PPT	VV-Viva, QZ, CHK, T-CS	F&S	2	-	LH
CO1, CO2, CO6	Explain contemporary management strategies for cognitive disorders specifically for Alzheimer's disease and amnesia including pharmacological treatments and non-pharmacological interventions, and discuss the role of palliative care and support for patients and their caregivers. Additionally, identify and correlate the concept of Alzheimer's disease within the framework of Unani medicine and analyze treatment strategies for both Alzheimer's disease and Nisyān.	CAP	DK	KH	SDL, CBL, PrBL	COM, PA, CL-PR	F&S	2	-	NLHT10.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT10.1	Management strategies for Cognitive Disorders	<p>1. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> Present a case study on a patient with Alzheimer's disease and amnesia, detailing symptoms, treatment plan, and challenges.

- Small groups discuss pharmacological treatments and non-pharmacological interventions (e.g., cognitive therapies, caregiver support).
- Discuss the role of palliative care in managing Alzheimer's disease.
- Provide an overview of Nisyān (memory loss) in Unani medicine.
- Groups analyze and compare modern treatment strategies for Alzheimer's disease with Unani remedies (e.g., medicines, dietary modifications).
- Each group presents findings on treatment strategies, palliative care, and the Unani perspective on cognitive disorders.
- Discuss similarities and differences between modern and Unani approaches.
- Brief reflection session where students share what they've learned and discuss the integration of pharmacological and non-pharmacological strategies in managing cognitive disorders.

2. Project-Based Learning (Optional):

- Research Project: Students can undertake a research project exploring the effectiveness of a specific non-pharmacological intervention for Alzheimer's disease, culminating in a presentation or a detailed report that outlines their findings and recommendations.
- Integration of Unani Medicine: Assign students to create a project that compares contemporary Alzheimer's disease management strategies with those derived from Unani medicine. They can analyze treatment efficacy, patient outcomes, and cultural considerations.
- Developing a Caregiver Support Program: Students can design a comprehensive caregiver support program that includes educational sessions, resource materials, and coping strategies for caregivers of patients with Alzheimer's disease.

- Simulation Exercises: Organize simulation exercises where students role-play as healthcare providers, patients, or caregivers. They can create scenarios that require them to apply both contemporary and Unani medicine strategies in managing Alzheimer's disease.
- Have students present their projects to their peers, incorporating feedback from self-directed learning experiences. This can be done through posters, PowerPoint presentations, or interactive sessions to share insights and foster discussion.

3. Self-Directed Learning (Optional):

- Literature Review: Students can conduct a literature review on contemporary management strategies for Alzheimer's disease and amnesia. This involves gathering and summarizing recent research articles, reviews, and guidelines related to pharmacological and non-pharmacological interventions.
- Case Study Analysis: Provide students with case studies of patients with Alzheimer's disease and amnesia and ask them to analyze the management strategies used, considering both contemporary and Unani approaches. They can present their findings in a written report.
- Personal Reflection: Have students keep a reflective journal throughout their self-directed learning process, documenting their insights, challenges faced, and how their understanding of Alzheimer's disease management evolved.
- Resource Creation: Students can develop educational materials, such as brochures or infographics, to explain Alzheimer's disease management strategies to patients and caregivers, incorporating both pharmacological and non-pharmacological approaches.

Non Lecture Hour Practical										
S.No	Name	Description of Practical Activity								
Topic 11 Nervous System Part 7: اضطرابات العرع والحركة dīṭarābāt al-Ṣar' wa Ḥaraka (Epileptic and Movement Disorders) (LH : 5, NLHT: 4, NLHP: 6 hours)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe Ṣar' (Epilepsy), including its definition, classification, and causes. Identify and classify seizure types (focal, generalized, unknown onset) and their subtypes. Recognize key clinical features, including postictal states and auras, and explain the pathophysiology of epilepsy related to neuronal excitability, neurotransmitter imbalances, and brain regions.	CK	MK	K	L, L&PPT , L_VC	CHK, QZ , T- CS, VV-Viva	F&S	2	-	LH
CO1, CO3	Differentiate between epilepsy and other conditions with seizure-like episodes. Implement a diagnostic approach for epilepsy by conducting patient history assessments, performing physical examinations, and utilizing appropriate diagnostic tools such as laboratory tests, MRI, and EEG in clinical practice.	CAP	MK	KH	L&PPT , L	QZ , T-CS, CHK, VV- Viva	F&S	2	-	LH
CO4	Describe the immediate management of seizures, including first aid measures and criteria for seeking medical help. Apply post-episode treatment principles, focusing on Munḍij/Mushil therapy and 'Ilāj bi'l Taghdhiya, while also enumerating Ma'mulāt-i-Maṭab. Evaluate Ṣar' (Epilepsy) prognosis in clinical cases based on seizure characteristics and comorbidities, and understand contemporary anti-epileptic drugs for long-term management.	CAP	MK	KH	L&GD, PBL, RP, SIM, CBL	SP, PRN, OSCE, Log book, VV- Viva	F&S	2	-	NLHT11.1

CO2, CO6	Demonstrate respectful and empathetic communication with patients of Şar' (Epilepsy), ensuring clear and compassionate dialogue during medical consultations, diagnosis discussions, and management planning.	AFT-REC	DK	SH	RP, DIS	SP, DOPS, PA, DOPS	F&S	2	-	NLHP11.1
CO3	Demonstrate the ability to interpret the results of diagnostic tests for Şar' (Epilepsy), including EEG findings and neuroimaging studies (e.g., MRI, CT scans), demonstrating proficiency in analyzing the significance of results and their implications for patient management.	PSY-MEC	MK	SH	DIS, LRI, SIM	CBA, OSCE, P-EXAM	F&S	2	-	NLHP11.2
CO1, CO3	Describe movement disorders and classify them into primary and secondary categories, further delineating subtypes. Explain the concept of Dā' al-Raqş, and Ra'sha including definition, classification, underlying causes and clinical features of both.	CK	MK	K	L_VC, L&PPT, L	M-POS, S-LAQ, PRN	F&S	2	-	LH
CO3	Identify and describe the key components of a systematic diagnostic approach to Movement Disorders, including the importance of taking a comprehensive clinical history, the use of appropriate diagnostic scales, and the role of neuroimaging and laboratory tests in differentiating between various movement disorders.	CK	MK	K	RP, CBL, PBL	T-CS, SP, PRN, M-POS	F&S	2	-	NLHT11.2
CO1	Apply the principles and management strategies to address the movement disorders specifically Dā' al-Raqş, and Ra'sha.	CAP	MK	KH	L&PPT, L	CBA, PRN, S-LAQ	F&S	2	-	LH
CO1	Define Parkinson's disease, explain its pathophysiology, identify genetic and environmental risk factors contributing to its development, and recognize the primary clinical features including both motor and non-motor symptoms.	CAN	MK	KH	L_VC, L&PPT, L	PRN, COM, T-CS	F&S	2	-	LH

	Also discuss the staging of the disease using established scales.									
CO3	Apply diagnostic criteria for Parkinson's disease by taking a detailed clinical history, performing a physical examination, and utilizing diagnostic scales. Analyze the role of neuroimaging in confirming the diagnosis and excluding other conditions.	CAP	MK	KH	FC, L&GD	SP, PRN, VV-Viva	F&S	2	-	NLHT11.3
CO1	Identify and corelate the concept of Parkinson's disease within the framework of Unani medicine and describe treatment strategies. Develop an understanding of contemporary management strategies for Parkinson's, including pharmacological treatments and non-pharmacological interventions.	CS	DK	KH	CBL, BS, RP	PRN, CR-RED, CR-W, PA	F&S	2	-	NLHT11.4
CO3	Conduct a full clinical examination of a Parkinson's disease patient in a simulated or real clinical scenario, accurately identifying cardinal signs (resting tremor, bradykinesia, rigidity, postural instability), and explaining the significance of each finding in the diagnosis and management of Parkinson's disease	PSY-GUD	MK	SH	D, SIM, CBL, L_VC	DOPS, OSCE, DOPS, CBA, CHK	F&S	2	-	NLHP11.3

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT11.1	Immediate and long term management of Şar' (Epilepsy)	<p>Lecture → Case Based Learning (60 mins)</p> <p>1. Lecture & Group Discussion (30 mins):</p> <ul style="list-style-type: none"> After delivering a lecture, divide students into small groups.

- Provide each group with different topics from the LO (e.g., immediate management of seizures, anti-epileptic drugs, Munḍij/Mushil therapy, prognosis evaluation).
- Each group researches their topic, then presents their findings to the rest of the class.

2. Case Based Learning (30 mins):

- Present a clinical case of a patient experiencing seizures (e.g., a patient with recurring generalized tonic-clonic seizures).
- Students will analyze the case in small groups, discussing the immediate steps during a seizure episode, the diagnostic approach, and long-term management plans, as per principles of Unani medicine.

3. Problem Based Learning (Optional):

- Present a complex problem where a patient has recurrent seizures but is unresponsive to standard anti-epileptic drugs.
- The task is for students to collaboratively explore alternative treatment options, including Munḍij/Mushil therapy, dietary approaches, and identify potential challenges in management.

4. Simulation (Optional):

- Use a patient simulator or virtual environment to enact a seizure episode.
- Students will practice immediate management, including first aid measures (e.g., securing the airway, positioning the patient), and discuss when to seek advanced medical help.
- Follow-up activities can include ordering appropriate diagnostic tests (EEG, MRI) and prescribing treatment.

		<p>5. Role Play (Optional):</p> <ul style="list-style-type: none"> • Divide students into groups where one plays the role of a patient with epilepsy, another as the caregiver, and the third as the healthcare provider. • The healthcare provider will explain management strategies, including the use of Munḍij/Mushil therapy, first aid during seizures, and anti-epileptic medications.
NLHT11.2	<p>Comprehensive Diagnostic Approach to Movement Disorders</p>	<p>Any one of the given activities:</p> <p>1. Case Based Learning (60 minutes):</p> <ul style="list-style-type: none"> • Present patient cases with various movement disorders (e.g., Parkinson's, Huntington's) and have students discuss the systematic diagnostic approach, focusing on clinical history, diagnostic scales, and necessary investigations. <p>2. Problem-based Learning (60 minutes):</p> <ul style="list-style-type: none"> • Assign students complex movement disorder cases where they must research, discuss, and formulate diagnostic approaches, including the role of neuroimaging and laboratory tests. <p>3. Role Play (Optional):</p> <ul style="list-style-type: none"> • Have students role-play as physicians taking comprehensive clinical histories from simulated patients (peers or standardized patients) with movement disorders. They must identify key diagnostic components and suggest appropriate diagnostic tests.

		<ul style="list-style-type: none"> • Allow students to practice using movement disorder diagnostic scales (e.g., Unified Parkinson's Disease Rating Scale, Tremor Rating Scale) in small groups. Students can apply the scales on real or simulated cases and analyze the results.
NLHT11.3	Diagnostic criteria for Parkinson's Disease	<p>Any one of the given activities:</p> <p>1. Lecture & Group Discussion (60 minutes):</p> <ul style="list-style-type: none"> • Deliver a lecture covering overview of Parkinson's disease diagnostic criteria, emphasizing the importance of history-taking, physical exams, and the use of scales like the Hoehn and Yahr scale. Highlight the role of neuroimaging in confirming the diagnosis and excluding differential conditions. • Discuss real clinical cases where students can see how these criteria are applied, and explain the decision-making process in using diagnostic tools. • Use polls or quizzes to check student comprehension on how to apply diagnostic criteria. • Split students into groups (4-6) and provide each group with a case study of a patient with suspected Parkinson's disease. • Ask students to apply the appropriate diagnostic scales (e.g., Hoehn and Yahr) to stage the disease. • Discuss the role of neuroimaging in the case, including when and why it is necessary. <p>2. Flipped Classroom (In class: 60 minutes):</p> <ul style="list-style-type: none"> • Pre-Class Assignment: Provide students with videos or reading materials that cover the diagnostic criteria for Parkinson's disease, physical

		<p>examination techniques, and the use of diagnostic scales. Ask students to review clinical case scenarios and apply the diagnostic criteria, filling out worksheets that focus on history-taking, physical exam findings, and recommendations for neuroimaging.</p> <ul style="list-style-type: none"> • In-Class Activity: Students work in small groups to discuss their pre-class case solutions. They must justify their diagnostic decisions, focusing on how they used history, physical exams, and scales in each case. One student plays the patient, and others act as clinicians. The clinicians take the patient's history, perform a mock physical exam, and apply diagnostic scales to reach a conclusion. Groups then analyze the need for neuroimaging and discuss how it might confirm the diagnosis or exclude other conditions. Provide real-time feedback and clarification while groups work through their cases.
NLHT11.4	Management of Marḍ-i-Bārkinsan (Parkinson's Disease)	<p>Any one of the given activities:</p> <p>1. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Create a detailed case study of a patient diagnosed with Parkinson's disease, including symptoms, treatment history, and personal background. • Divide students into small groups and assign them the case study to analyze. • Identify key clinical features of Parkinson's disease. • Discuss how the symptoms and treatments correlate with both Unani medicine and contemporary management strategies. • Propose a comprehensive treatment plan that integrates Unani approaches (like dietary modifications, herbal remedies) with contemporary pharmacological treatments (like dopaminergic

		<p>medications) and non-pharmacological interventions (like physical therapy and counseling).</p> <ul style="list-style-type: none">• Each group presents their findings and treatment plans, facilitating class discussion and feedback. <p>2. Brain Storming (60 mins):</p> <ul style="list-style-type: none">• Divide students into groups and assign themes related to Parkinson's disease (e.g., pharmacological treatments, Unani principles of management, lifestyle modifications).• Each group brainstorms as many ideas as possible for their assigned theme, focusing on treatment strategies from both Unani and contemporary perspectives.• Groups share their brainstormed ideas with the class, creating a collective list of strategies.• Encourage students to identify overlaps and unique contributions from both medical systems, fostering a deeper understanding of integrated treatment. <p>3. Role-Play (Optional):</p> <ul style="list-style-type: none">• Assign roles to students (e.g., patient, healthcare provider, family member) based on the case study.• Students act out a consultation where the healthcare provider discusses the diagnosis, treatment options from Unani and contemporary perspectives, and management strategies.• After the role-play, facilitate a debriefing session where students reflect on their experiences, discussing challenges and insights gained about the integration of both frameworks.
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Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP11.1	Empathetic communication with patients of Şar'(Epilepsy)	<p>Role-Playing → Discussion (120 mins)</p> <p>1. Role-Playing Activity (30 mins):</p> <ul style="list-style-type: none"> • Divide students into pairs. One student plays the role of the doctor, and the other plays the role of a patient diagnosed with epilepsy. • The "patient" should act out a scenario where they are concerned about their condition, afraid of seizures happening in public, and possibly worried about treatment side effects. • The "doctor" should respond with clear, empathetic, and compassionate communication, addressing the patient's concerns, explaining the diagnosis of epilepsy, the potential triggers, and the available management options in a reassuring manner. • The doctor should also ask the patient open-ended questions to understand their emotional state and provide comfort, ensuring all aspects of the patient's concerns are addressed. <p>2. Patient Education Session (30 mins):</p> <ul style="list-style-type: none"> • The student playing the "doctor" should provide a brief educational session about epilepsy, explaining how seizures occur, their potential causes, and how treatment can help manage the condition. • Emphasis should be on clear and understandable language, avoiding medical jargon, and providing information in an empathetic tone. <p>3. Peer Feedback and Reflection (20 mins):</p>

		<ul style="list-style-type: none"> • After each role-play, the student in the doctor's role receives feedback from their peer acting as the patient. This feedback should focus on how empathetic and respectful the communication was, as well as the clarity and comfort provided. • Discuss what could be improved to ensure patients feel supported and understood. <p>4. Group Discussion (20 mins):</p> <ul style="list-style-type: none"> • As a class, discuss common challenges doctors face when communicating with epilepsy patients. Talk about patient fears, stigma, and how these can be addressed respectfully and empathetically. • Discuss non-verbal communication techniques, such as eye contact, body language, and tone of voice, and how these contribute to effective empathetic communication. <p>5. Reflection and Self-Assessment (20 mins):</p> <ul style="list-style-type: none"> • Students take 10 minutes to reflect individually on the activity. They can write down what they learned about empathetic communication and how they can apply these skills in real-life scenarios. • Finish the session with a brief self-assessment of how well they communicated and what areas they would like to improve in.
NLHP11.2	Interpretation of Lab reports of Şar' (Epilepsy)	<p>Lecture & Group Discussion → Lab Report Interpretation (120 mins)</p> <p>1. Lecture & Group Discussion (60 minutes):</p>

- Present epilepsy case studies with real or simulated diagnostic test results (EEG, MRI, CT scans). Have students work in small groups to interpret the findings, discuss their significance.
- Each group presents their interpretation, followed by an instructor-led discussion to clarify the significance of various EEG patterns or neuroimaging findings (e.g., mesial temporal sclerosis, focal lesions).
- Create problem-solving sessions where students are given specific diagnostic test results (e.g., abnormal EEG waveforms, MRI images). They need to collaboratively determine the type of epilepsy, its likely etiology, and treatment implications.
- Show EEG traces and MRI/CT scan images during the lecture and ask students to identify abnormalities and explain their clinical significance. Use real-time interactive software or apps where students can highlight areas of interest (e.g., spike-and-wave discharges on EEG).

2. Lab Report Interpretation (60 minutes):

- Provide students with anonymized EEG reports and neuroimaging (MRI/CT) lab reports from actual or simulated cases. Students must interpret the findings in small groups, fill out an analysis template, and make clinical management recommendations.
- Follow-up with group discussions comparing interpretations and how they would influence treatment decisions (e.g., surgical options for lesions found in neuroimaging).
- Have students review raw EEG and MRI data, interpret them, and then write their own lab reports as if they were clinical specialists. They would summarize the findings, draw conclusions, and suggest next steps for the patient's management. This exercise improves analytical and reporting skills.

		<ul style="list-style-type: none"> • Use video-assisted EEG lab sessions where students are shown EEG monitoring results paired with video recordings of seizures. Students interpret EEG patterns in relation to seizure events and analyze the correlation between the electrical activity and clinical manifestations. <p>3. Simulation (Optional):</p> <ul style="list-style-type: none"> • Use virtual EEG simulation software where students can practice identifying abnormal EEG patterns associated with different types of epilepsy (e.g., generalized spikes, focal spikes). This activity can allow students to observe waveforms in a controlled virtual environment. • Use neuroimaging simulation tools or software (e.g., MRI/CT scan simulators) to allow students to explore brain anatomy, identify epileptogenic lesions, and interpret findings in simulated patient cases. • Simulations could include various scenarios where students have to analyze MRI scans showing structural abnormalities like tumors, vascular malformations, or sclerosis that contribute to epilepsy.
NLHP11.3	Clinical Examination of Parkinson's Case	<p>Demonstration → Case Based Learning → Discussion (120 mins)</p> <p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> • Instructors demonstrate the clinical examination of a Parkinson's disease patient, including the assessment of cardinal signs. Students then practice these techniques in pairs or small groups, allowing for hands-on experience. <p>or</p>

		<p>Lecture and Video (30 mins):</p> <ul style="list-style-type: none"> • Deliver a lecture about the clinical examination • Then, show video recordings of clinical examinations conducted by experienced clinicians. • Students can analyze the techniques used, the signs identified, and discuss their relevance in diagnosing Parkinson’s disease <p>2. Case Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Present case studies of patients with Parkinson’s disease. Students discuss and plan the clinical examination process, identifying key signs to assess. This encourages critical thinking and application of knowledge. <p>3. Presentation and Discussion (30 mins):</p> <ul style="list-style-type: none"> • Groups give presentations before class highlighting their findings. • Presentation followed by instructor led class discussion and debriefing. <p>4. Simulation (Optional):</p> <ul style="list-style-type: none"> • Utilize high-fidelity simulation labs where students can interact with standardized patients or mannequins exhibiting Parkinson’s disease symptoms. This method provides a realistic environment for practicing clinical examinations.
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Topic 12 Nervous System Part 8: اضطرابات الجهاز العصبي اللاإرادي ḍtarābāt al-Jahāz al-‘Aṣbī -al Airādī (Autonomic Nervous System Disorders) (LH : 1, NLHT: 1, NLHP: 4 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
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CO1, CO3	Describe Autonomic Nervous System (ANS) disorders, including their definition and classification. Define Sadr (Orthostatic Hypotension) as a key manifestation of ANS dysfunction, explain its causes and identify its clinical features. Discuss the differential diagnosis of orthostatic hypotension, including other conditions that may present with similar symptoms, such as vasovagal syncope and cardiac arrhythmias	CK	MK	K	L, L_VC, L&PPT	T-CS, CHK, QZ, VV-Viva	F&S	2	-	LH
CO1	Explain the principles of management and the different strategies used for the treatment of Sadr (Orthostatic Hypotension), including non-pharmacological approaches ('Ilāj bi'l Tadbīr regimens, lifestyle modifications), pharmacological interventions, and addressing reversible causes.	CC	MK	KH	RP, FC, CBL, PBL	S-LAQ, QZ, CBA	F&S	2	-	NLHT12.1
CO3	Demonstrate the ability to interpret diagnostic tests for Sadr (Orthostatic Hypotension), including blood pressure measurements in different positions, and analyze results from relevant laboratory tests (e.g., complete blood count, electrolyte panel) and patient history to assess underlying causes.	PSY-GUD	MK	KH	SIM, LRI, CBL, D, PL	P-EXAM, CBA	F&S	2	-	NLHP12.1
CO3	Perform a comprehensive clinical examination of a patient with orthostatic hypotension, including the assessment of vital signs in different positions, evaluation of symptoms, and interpretation of findings to establish a diagnosis.	PSY-COR	MK	SH	D, RP	DOPS, Mini-CEX, OSCE, DOPS	F&S	2	-	NLHP12.2

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
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NLHT12.1	Management strategies used for Sadr (Orthostatic Hypotension)	<p>Any one of the given activities:</p> <p>1. Case-Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Present real-life patient scenarios with orthostatic hypotension where students must discuss and identify appropriate management strategies. • Small groups can work through the case, focusing on understanding the principles of management like fluid intake, physical maneuvers, medication, and identifying reversible causes. <p>2. Problem-Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Provide students with a problem scenario involving orthostatic hypotension (e.g., an elderly patient experiencing frequent falls). Students work in groups to propose management strategies based on underlying principles. • Students can research and present their solutions, ensuring they incorporate lifestyle modifications, pharmacological approaches, and patient education. <p>3. Role-Play Activity (60 mins):</p> <ul style="list-style-type: none"> • Students can role-play the physician-patient interaction where one student is the doctor explaining the management strategies to a patient with orthostatic hypotension. • Focus on communication, patient education regarding lifestyle changes (e.g., rising slowly, increasing salt intake), and proper use of compression stockings. <p>4. Simulation (Optional):</p>
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		<ul style="list-style-type: none"> Using a mannequin or standardized patient, students can simulate the assessment and management of orthostatic hypotension, including positioning strategies (e.g., lying down and gradual standing) and the administration of medications. <p>5. Flipped Classroom (Optional):</p> <ul style="list-style-type: none"> Provide students with pre-reading materials or videos on management principles (e.g., pharmacological and non-pharmacological approaches). In class, students will apply this knowledge to clinical cases and participate in discussions.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP12.1	Interpretation of diagnostic tests for Sadr (Orthostatic Hypotension)	<p>Demonstration → Lab Report Interpretations → Case-Based Learning (120 mins)</p> <p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> Instructors demonstrate how to perform and record blood pressure measurements in various positions (e.g., supine, sitting, standing) to assess for orthostatic hypotension. Show how to analyze laboratory test results relevant to orthostatic hypotension. <p>2. Lab Report Interpretations (30 mins):</p> <ul style="list-style-type: none"> Divide students into groups to analyze different lab reports, identifying abnormalities related to orthostatic hypotension.

		<ul style="list-style-type: none"> • Present lab results with guided questions to help students interpret electrolyte levels and their significance. • Provide a clinical case scenario with corresponding lab reports for group discussion on interpretation. • After the interpretation activities, students write a brief summary reflecting on their learning and challenges faced. <p>3. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Provide case studies where students must interpret diagnostic tests and come up with management plans based on their findings, facilitating guided discussions among peers and instructors. <p>4. Simulated Patient Scenarios (Optional):</p> <ul style="list-style-type: none"> • Students interact with standardized patients or use simulation software to practice interpreting diagnostic test results and determining the presence of orthostatic hypotension based on patient history and symptoms. <p>5. Peer Learning (Optional):</p> <ul style="list-style-type: none"> • Students work in pairs or small groups to teach each other how to interpret blood pressure measurements and lab results, fostering collaborative learning.
NLHP12.2	Clinical examination of Sadr (Orthostatic Hypotension) case	<p>Demonstration → Role Play (120 mins)</p> <p>1. Demonstration (60 mins):</p>

		<ul style="list-style-type: none"> The instructor demonstrates the clinical examination process, including taking vital signs in different positions and evaluating symptoms. This should include clear explanations of techniques and rationale. Demonstration followed by guided practice by students. <p>2. Role Play (60 mins):</p> <ul style="list-style-type: none"> Assign students to act as patients with orthostatic hypotension, providing them with specific symptoms and medical histories. Other students will take on the role of clinicians conducting the examination. The “patient” should simulate typical experiences, such as dizziness or lightheadedness, to provide realistic scenarios for the “clinician.” After completing the role play, have the students provide constructive feedback to each other on their examination techniques, communication skills, and overall approach to managing the patient’s concerns. This can foster a collaborative learning environment. <p>3. Early Clinical Exposure (Optional):</p> <ul style="list-style-type: none"> Provide opportunities for students to observe and participate in clinical rotations where they can see orthostatic hypotension cases firsthand and practice assessments under supervision.
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Topic 13 Nervous System Part 9: اضطرابات الجهاز العصبي المحيطي ḍṭarābāt al-Jahāz al-‘Aṣbī -al Muḥīṭī (Peripheral Nervous System Disorders) (LH : 1, NLHT: 2, NLHP: 2 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Describe Peripheral Nervous System (PNS) disorders, including their definition and classification. Define Waram-i-A’ṣāb and explain its pathophysiology, causes and identify its clinical features such as Waja’ al-A’ṣāb	CK	MK	K	CBL, PBL, RP	T-CS, COM, M-POS	F&S	2	-	LH

	(Neuralgia), sensory disturbances, muscle weakness, and reflex changes. Discuss the differential diagnosis.									
CO1, CO3	Outline the diagnostic approach for neuritis, including clinical examination, nerve conduction studies, and imaging techniques, while emphasizing the importance of identifying the underlying cause of the inflammation. Describe the principles of management and management strategies with a focus on 'Ilāj bi'l Tadbīr regimens for pain alleviation.	CC	MK	KH	LRI, D	CBA, COM, M-POS, PRN	F&S	2	-	NLHT13.1
CO3	Assess pain severity and its impact on daily living in patients with neuralgia using validated pain assessment scales, including the Visual Analog Scale (VAS) and Numeric Rating Scale (NRS).	PSY-SET	DK	KH	SIM, CBL, RP, D	OSCE, P- EXAM, Mini- CEX	F&S	2	-	NLHP13.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT13.1	Diagnostic approach for Waram-i-A'ṣāb (Neuritis)	<p>Demonstration → Lab Report Interpretation → Role Play (120 mins)</p> <p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> The instructor demonstrates a comprehensive clinical examination of a simulated patient presenting with neuritis, including assessing sensory and motor functions, checking reflexes, and documenting findings. The instructor uses a standardized patient or mannequin. Conducts a step-by-step assessment, emphasizing palpation and movement. Students observe and take notes on the examination techniques used.

		<p>2. Lab Report Interpretation (60 mins):</p> <ul style="list-style-type: none"> • Provide students with sample lab reports of nerve conduction studies and ask them to identify abnormalities indicating neuritis. • Divide students into small groups to review different patient scenarios. • Each group presents their interpretation, highlighting how findings correlate with potential diagnoses. • Analyze imaging results (MRI/CT) related to neuritis cases, present images and ask students to identify signs of inflammation or nerve damage. Encourage discussion on how imaging contributes to diagnosis and management. <p>3. Role Play Activity for Management & Rehabilitation (30 mins):</p> <ul style="list-style-type: none"> • Students role-play as healthcare providers educating a "patient" on neuritis, its management, and 'Ilāj bi'l Tadbīr regimens. • One student plays the role of the healthcare provider, while another acts as the patient. • Focus on explaining the condition, management strategies, and self-care practices, using layman's terms. • Role-play a rehabilitation session for a patient with neuritis, focusing on pain management techniques. • Discuss the effectiveness of various 'Ilāj bi'l Tadbīr strategies in managing symptoms.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP13.1	Assessment of pain severity in Waja' al-A'ṣāb (Neuralgia)	Demonstration → Case Based Learning → Simulation (120 mins)

		<p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> • The instructor demonstrates the use of the Visual Analog Scale (VAS) and Numeric Rating Scale (NRS) on a volunteer or a simulated patient. • Students practice using these scales on their peers or in role-play scenarios. <p>2. Case-Based Learning (60 mins):</p> <ul style="list-style-type: none"> • Present clinical vignettes of patients with neuralgia. Students discuss how to assess pain severity and choose appropriate assessment scales. • Groups present their approaches to the class. <p>3. Simulation (30 mins):</p> <ul style="list-style-type: none"> • Utilize simulation software or scenarios that mimic real-life situations where pain assessment is critical. • Students debrief on their performance and the strategies they used for pain assessment. <p>4. Role Play (Optional):</p> <ul style="list-style-type: none"> • Students take turns acting as healthcare providers and patients with neuralgia. They practice assessing pain using the scales and discussing the implications of the findings. • Peers provide feedback on the assessment and communication skills.
<p>Topic 14 Nervous System Part 10: ضعف دماغ (Du'f-i-Dimāgh (Cerebral Asthenia)) (LH : 0, NLHT: 1, NLHP: 0 hours)</p>		

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	classify Ḍu'f-i-Dimāgh (Cerebral Asthenia), its types along with their Asbāb (causes), identify and explain the clinical features of both Ḍu'f-i-Dimāgh Umūmī and Ḍu'f-i-Dimāgh Juz'ī, outline the management principles for Ḍu'f-i-Dimāgh Umūmī, and enumerate the Ma'mulāt-i-Maṭab specific to it, thereby enhancing their understanding of Unani principles in clinical practice.	CK	MK	K	PBL, CBL, RP	PRN, SP	F&S	2	-	NLHT14.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT14.1	Overview of Ḍu'f-i-Dimāgh (Cerebral Asthenia)	<p>1. Case-Based Learning Activity (60 minutes):</p> <ul style="list-style-type: none"> Present students with detailed clinical case scenarios of patients exhibiting symptoms of Ḍu'f-i-Dimāgh. Each case should highlight different types (Umūmī and Juz'ī) and their respective Asbāb. Students can work in small groups to analyze the case, identify the type of weakness, and suggest management principles. Facilitate discussions after the case presentations where groups share their findings. Encourage critical thinking by asking them to defend their management approaches based on Unani principles. Each group can prepare a presentation summarizing the clinical features, causes, and management principles of Ḍu'f-i-Dimāgh Umūmī and Juz'ī, incorporating the therapeutic practices (Ma'mulāt-i-Maṭab). <p>2. Problem-Based Learning (Optional):</p>

		<ul style="list-style-type: none"> • Create scenarios where students must solve problems related to patient management for Ḍu'f-i-Dimāgh. This could involve understanding the causes and developing treatment plans based on Unani medicine. • Assign students to research specific aspects of Ḍu'f-i-Dimāgh, including different types and management strategies. They can work collaboratively to create a comprehensive overview of the topic. • Encourage students to maintain journals reflecting on their learning process, how they approached problem-solving, and insights gained about Ḍu'f-i-Dimāgh. <p>3. Role Play (Optional):</p> <ul style="list-style-type: none"> • Students can role-play as healthcare providers and patients. One student can present symptoms of Ḍu'f-i-Dimāgh, while others provide a clinical assessment and propose management strategies. • Role-play various therapeutic practices used in treating Ḍu'f-i-Dimāgh Umūmī. This could involve demonstrating dietary recommendations, lifestyle changes, or regiminal therapies in a simulated environment.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
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Topic 15 حميات Hummayāt (Fever) (LH : 15, NLHT: 11, NLHP: 22 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe the definition, classification, and stages of Ḥummā (Fever), with a specific focus on: 1. Ḥummā Yawm, including its distinction from other types of fever.	CK	MK	K	L	QZ , M-CHT, T-CS	F&S	3	-	LH

	<p>2. Ḥummā Khilṭiyya 'Ufūniyya, outlining its classification based on Akhlāṭ and Mastuqad-i-Ufūnat.</p> <p>3. Ḥummā Waramiyya, along with its causes.</p>									
CO3	Identify the factors that predispose individuals to fever (Ista'dade Bukhar), describe the typical patterns of fever based on Awqāt-i-Bukhār and Muddat-i-Bukhār, and recognize the key diagnostic signs (Alamaat se Istedlal) associated with febrile conditions.	CC	MK	KH	PBL, RP, DIS	T-CS, PA, CL-PR, QZ	F&S	3	-	NLHT15.1
CO1, CO3	Enumerate the common regimens adopted in the beginning of fevers.	CC	MK	KH	L	QZ, T-CS, CL-PR	F&S	3	-	LH
CO1, CO3	Identify the common complications of fevers and explain the principles of diagnosis used to assess febrile conditions.	CC	MK	KH	RP, BS	T-CS, SP, QZ, CL-PR	F&S	3	-	NLHT15.2
CO1	Describe the principles of management adopted for undiagnosed fevers.	CC	MK	KH	L&GD, L	SP, T-CS, S-LAQ	F&S	3	-	LH
CO1	Explain the dietary principles adopted in fevers.	CC	MK	KH	CBL, DIS	COM, QZ, CL-PR, T-CS	F&S	3	-	NLHT15.3
CO1	Enumerate the Ma'mulāt-i-Maṭab for Ḥummayāt.	CK	DK	K	DIS, LS, PER	CL-PR, COM, VV-Viva	F&S	3	-	NLHT15.4
CO1	Explain principles of management, and management strategies for Ḥummā Yawm.	CC	MK	KH	DIS, RP	VV-Viva, CL-PR, SP, Log book	F&S	3	-	NLHT15.5

CO1, CO3	Describe the clinical features and diagnostic methods for Ḥummā Balghamiyya.	CC	MK	KH	L&PPT	VV-Viva, PUZ, T-CS, QZ , S-LAQ	F&S	3	-	LH
CO1, CO3	Describe the clinical features and diagnostic methods for Ḥummā Ghibb,	CC	MK	KH	L&PPT	PUZ, S-LAQ, VV-Viva, QZ , T-CS	F&S	3	-	LH
CO1, CO3	Describe the clinical features and diagnostic methods for Ḥummā Rib'.	CC	MK	KH	L&PPT	QZ , PUZ, T- CS, S-LAQ, VV-Viva	F&S	3	-	LH
CO1, CO3	Describe the clinical features and diagnostic methods for Ḥummā Muṭbiqa.	CC	MK	KH	L&PPT	S-LAQ, QZ , PUZ, T-CS, VV-Viva	F&S	3	-	LH
CO1	Explain principles of management, and management strategies for Ḥummā Balghamiyya.	CC	MK	KH	L&PPT	S-LAQ, T- CS, VV-Viva, PUZ, QZ	F&S	3	-	LH
CO1	Explain principles of management and management strategies for Ḥummā Ghibb.	CC	MK	KH	L&PPT	T-CS, QZ , VV-Viva, PUZ, S-LAQ	F&S	3	-	LH
CO1	Explain principles of management and management strategies for Ḥummā Muṭbiqa.	CC	MK	KH	L&PPT	T-CS, S- LAQ, VV- Viva	F&S	3	-	LH
CO1, CO3	Explain Ḥummā Murakaba, including its types, and describe Shaṭur al-Ghibb along with its sub-types, clinical features, principles of management, and management strategies.	CC	MK	KH	L&PPT	S-LAQ, T- CS, PRN	F&S	3	-	LH

CO1	Explain the fundamental principles of management for Ḥummā Ḥādda and the strategies for addressing its complications.	CC	MK	KH	L&PPT	S-LAQ, PRN, T-CS	F&S	3	-	LH
CO1, CO3	Explain the definition, nomenclature, and etiopathogenesis of Ḥummā Diqqiyya (tubercular fever); enumerate and describe the various stages of Ḥummā Diqqiyya with emphasis on clinical progression and symptomatology; and detail the clinical features of each stage of Ḥummā Diqqiyya	CC	MK	KH	L&PPT	T-CS, S-LAQ, PUZ, QZ	F&S	3	-	LH
CO1, CO3	Explain the concept of Buḥrān in Unani medicine, including its significance in the prognosis of disease progression and recovery, describe the different types of Buḥrān along with their respective implications for disease outcomes, and identify the clinical signs that indicate the onset of Buḥrān.	CK	MK	K	L&PPT	CL-PR, S-LAQ, T-CS	F&S	3	-	LH
CO1	Analyze the Tadbīr adopted during Buḥrān (Crisis).	CK	DK	KH	DIS, LS	CL-PR, QZ, COM, VV-Viva	F&S	3	-	NLHT15.6
CO3	Demonstrate accurate temperature measurement techniques, create and interpret fever charts under guidance, and identify fever patterns, documenting key findings while associating them with potential underlying conditions.	PSY-GUD	MK	SH	D, CBL, RP	P-EXAM, Mini-CEX, DOPS, DOPS, CBA	F&S	3	-	NLHP15.1
CO3	Perform a systematic clinical assessment of a patient with undiagnosed fever by collecting history, conducting a physical examination, selecting appropriate investigations, and proposing a provisional management plan in a	PSY-GUD	MK	KH	RP, CBL, PBL	P-VIVA, OSCE, CBA, DOAP, Mini-CEX	F&S	3	-	NLHP15.2

	simulated or controlled clinical environment under supervision.									
CO3	Demonstrate the ability to develop a comprehensive differential diagnosis for common fever syndromes, including malaria, dengue, typhoid, and viral infections, while effectively distinguishing between their key clinical features in a simulated case scenario under supervision.	PSY-COR	MK	SH	CBL, RP, PBL	P-VIVA, CL-PR, CBA, Mini-CEX, QZ	F&S	3	-	NLHP15.3
CO3	Demonstrate the ability to perform a Nabz (pulse) examination in patients with fever, identifying and interpreting the characteristics of the pulse while receiving guidance from an instructor.	PSY-GUD	NK	SH	RP, D, CBL	CHK, CBA, SP, DOPS, DOPS	F&S	3	-	NLHP15.4
CO2	Demonstrate the ability to value patient education in fever management by effectively communicating the importance of hydration, rest, and recognizing red-flag symptoms, while fostering a compassionate and supportive environment for patients	AFT-VAL	MK	SH	CBL, D, RP	DOPS, CHK, CBA, SP, DOPS	F&S	3	-	NLHP15.5
CO3	Demonstrate the ability to interpret common laboratory investigations used in the evaluation of fever, including CBC, ESR, CRP, LFTs, and renal function tests, while understanding the indications for specific tests based on suspected etiology, such as malarial parasite smear, dengue serology, and Widal test, in a guided clinical setting.	PSY-GUD	MK	SH	LRI	P-VIVA, QZ, CBA, SP, P-EXAM	F&S	3	-	NLHP15.6
CO1	Create and present an appropriate dietary chart for a patient with fever, incorporating nutritional requirements and recommendations for hydration, energy intake, and specific food types, based on dietary principles of Unani	PSY-GUD	MK	SH	TPW, W	RS, PA, SP	F&S	3	H-IBT	NLHP15.7

	medicine, while considering individual patient needs and preferences in a guided clinical setting.									
C02	Prepare patient education materials on fever management, incorporating evidence-based information, clear communication strategies, and culturally sensitive content to enhance patient understanding and promote effective self-care.	PSY-GUD	MK	SH	W, TPW	PA, Portfolios, P- POS, RS, PRN	F&S	3	-	NLHP15.8

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT15.1	Predisposing Factors, Patterns, and Diagnostic Indicators of Ḥumma (Fever)	<p>Group Discussion → Problem-Based Learning → Role Play (120 mins)</p> <p>Activity Structure:</p> <p>I. Introduction (10 mins): Brief overview of the session flow and relevance of understanding fever from a Unani perspective. Highlight the importance of identifying predisposing factors, understanding fever patterns, and recognizing diagnostic signs for effective management.</p> <p>II. Group Discussion (30 mins):</p> <p>Step 1: Break the class into 3 groups and assign discussion topics:</p> <ul style="list-style-type: none"> Group 1: Factors predisposing individuals to fever (Ista'dade Bukhar) such as environmental, dietary, and lifestyle factors, along with Mizaj (temperament). Group 2: Patterns of fever based on Awqāt-i-Bukhār (e.g., continuous, intermittent, quotidian) and Muddat-i-Bukhār (short, prolonged).

		<ul style="list-style-type: none">• Group 3: Diagnostic signs (Alamaat se Istedlal) for febrile conditions, including physical and systemic signs. <p>Step 2:</p> <ul style="list-style-type: none">• Groups discuss their topics and prepare key points to share.• Facilitator provides guidance, ensuring students align their discussion with Unani principles. <p>Step 3:</p> <ul style="list-style-type: none">• Each group presents a 5-minute summary of their findings.• Facilitator clarifies misconceptions and adds clinical examples. <p>III. Problem-Based Learning Activity (40 mins):</p> <p>Step 1: Divide students into new groups and present them with the following case scenario:</p> <p>Case: A 35-year-old male presents with recurrent episodes of fever over the past 10 days. He complains of chills, sweating, body aches, and fatigue. On examination:</p> <ul style="list-style-type: none">• Temperature: 102°F• Pulse: 96 bpm• Other findings: Coated tongue, mild dehydration, and occasional nausea. <p>Tasks:</p>
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1. Identify possible predisposing factors (Ista'dade Bukhar) based on the patient's history and lifestyle.
2. Classify the fever pattern based on **Awqāt-i-Bukhār** and **Muddat-i-Bukhār**.
3. Suggest key diagnostic signs (Alamaat) to confirm the underlying cause.
4. Formulate a differential diagnosis and initial management plan, incorporating Unani principles.

Step 2: Each group discusses the case and completes a structured worksheet to organize their answers.

Step 3: Groups present their findings, focusing on their reasoning for fever patterns, diagnostic signs, and predisposing factors.

IV. Role Play Activity (30 mins):

Step 1: Assign roles to students within each group:

- Patient with fever.
- Unani practitioner assessing the patient.
- Observer taking notes on diagnostic process.

Step 2: Students act out a consultation scenario where the Hakim:

1. Takes a detailed history to identify predisposing factors.
2. Observes and analyzes fever patterns.
3. Identifies key diagnostic signs using Unani diagnostic principles.
4. Provides initial advice and management recommendations.

		<p>Step 3: Observers provide feedback on the diagnostic process and communication skills.</p> <p>V. Debrief and Conclusion (10 mins): Facilitator summarizes key takeaways:</p> <ul style="list-style-type: none"> • Predisposing factors for fever. • Recognizing patterns of fever (Awqāt-i-Bukhār, Muddat-i-Bukhār). • Diagnostic signs and their clinical relevance. • Discuss real-world application of these concepts in clinical practice. • Q&A session to address doubts.
NLHT15.2	<p>Diagnosis and Assessment of Complications of Ḥummayāt (Fever)</p>	<p>Brainstorming → Role Play (120 mins)</p> <p>I. Introduction (10 mins): Brief introduction to the topic:</p> <ul style="list-style-type: none"> • Importance of understanding complications of fevers. • Relevance of diagnostic principles in identifying and managing febrile conditions. • Provide examples of common fever-related complications such as dehydration, febrile seizures, organ damage, and persistent inflammation. <p>II. Brainstorming Session (40 mins)</p> <p>Step 1: Warm-Up Discussion: Pose the following trigger questions to the group:</p> <ol style="list-style-type: none"> 1. What complications can arise if fever is not managed appropriately? 2. How do you differentiate between a simple fever and a complicated febrile condition?

3. What diagnostic methods, both modern and Unani, are essential for assessing febrile conditions?

Step 2: Brainstorming Activity: Divide the class into 3 groups and assign specific topics: **Group 1:** Common complications of febrile conditions and their clinical presentation, **Group 2:** Principles of diagnosis based on clinical history and physical examination, **Group 3:** Unani diagnostic methods, including Mizaj (temperament), Buhran (crisis), and pulse examination.

- Each group records their ideas on paper or whiteboards under the following headings:
 - Complications.
 - Diagnostic Principles.
 - Clinical Correlation with Unani Practices.
- Facilitator moderates the brainstorming session, ensuring students stay on topic and think critically.
- At the end, each group presents a 5-minute summary of their findings.

III. Role Play Activity (60 mins):

Step 1: Case Scenario Setup: Introduce the following case scenario:

Case: A 45-year-old male presents with high-grade fever for 7 days, chills, sweating, and body aches. The patient has developed confusion and reduced urine output in the last 24 hours. Vital Signs: Temperature: 104°F, Pulse: 120 bpm, BP: 100/60 mmHg, Respiratory Rate: 24/min.

- Provide students with additional details, including a mock patient history and physical exam findings.

Step 2: Role Assignment: Divide students into small groups of 4–5 and assign roles:

- Patient with fever.
- Unani practitioner assessing the patient.
- Family member providing additional history.
- Observer(s) evaluating the diagnostic process.

Step 3: Role Play: Each group performs a consultation, focusing on:

1. Identifying complications based on the case details (e.g., confusion → dehydration or neurological involvement, reduced urine output → possible renal impairment).
2. Applying diagnostic principles
3. Providing an initial assessment and suggested management plan, including Unani approaches.

Step 4: Feedback: Observers share feedback on the group's diagnostic reasoning and communication skills. Facilitator highlights key learning points, such as recognizing early signs of complications and linking them to diagnostic findings.

IV. Wrap-Up and Conclusion (10 mins): Summarize the key takeaways from the session:

- Common complications of fevers and their clinical implications.
- Principles of diagnosis for febrile conditions, integrating modern and Unani approaches.
- Emphasize the importance of timely recognition of complications and accurate assessment for effective management.
- Open the floor for questions and clarifications.

<p>NLHT15.3</p>	<p>Nutritional Management in Fevers</p>	<p>Group Discussion → Case-Based Learning (120 mins)</p> <p>Activity Structure:</p> <p>I. Introduction (10 mins): Begin with a brief overview of the importance of dietary management in febrile conditions. Discuss the general goals of diet in fevers:</p> <ul style="list-style-type: none"> • Maintaining hydration. • Supporting digestion (light and easily digestible foods). • Reducing the heat in the body. • Avoiding foods that aggravate fever (based on Mizaj/temperament). • Highlight the Unani perspective on temperament-based dietary recommendations. <p>II. Group Discussion (40 minutes)</p> <p>Step 1: Facilitated Brainstorming: Ask the students:</p> <ol style="list-style-type: none"> 1. What dietary modifications would you recommend for a patient with fever? 2. How would you consider Mizaj (temperament) in selecting foods for febrile patients? 3. What foods and drinks should be avoided during fever? <p>Write down their responses on a whiteboard or chart under the following headings:</p> <ul style="list-style-type: none"> • Recommended Foods. • Foods to Avoid. • Role of Mizaj.
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Step 2: Structured Group Discussion: Divide the class into small groups (4–5 students per group). Assign each group a topic related to dietary principles in fever:

- **Group 1:** Hydration strategies and suitable drinks.
- **Group 2:** Foods that promote digestion and reduce body heat.
- **Group 3:** Foods to avoid in febrile conditions and their rationale.
- **Group 4:** Customizing diets based on the patient's Mizaj

Groups discuss and prepare a 5-minute summary of their findings. Each group presents their topic, and the facilitator adds clinical insights or corrects misconceptions.

III. Case-Based Learning Activity (60 mins)

Step 1: Present Case Scenario: Introduce the following case:

Case: A 30-year-old female presents with a 5-day history of low-grade fever, headache, and fatigue. She complains of loss of appetite and a dry mouth. She has a Safravi Mizaj. Vitals: Temperature: 100.5°F, Pulse: 90 bpm, Dietary history: She has been eating spicy, oily foods and drinking very little water.

Tasks:

1. Identify dietary changes to address her symptoms and support recovery.
2. Suggest foods and drinks appropriate for her Safravi Mizaj to cool her temperament.
3. Explain the rationale for avoiding specific foods in this case.

Step 2: Group Activity: Assign groups to analyze the case and answer the tasks.

Provide them with guiding questions, such as:

- What foods would help reduce body heat?

		<ul style="list-style-type: none"> • How would hydration be addressed? • How does Safravi Mizaj influence dietary recommendations? <p>Groups document their recommendations and reasoning on a worksheet.</p> <p>Step 3: Case Presentation and Discussion:</p> <ul style="list-style-type: none"> • Each group presents their dietary plan and explains their reasoning. • The facilitator moderates the discussion, comparing recommendations and highlighting key dietary principles from Unani Medicine. <p>IV. Wrap-Up and Conclusion (10 mins)</p> <ul style="list-style-type: none"> • Summarize the key dietary principles for febrile conditions, emphasizing: <ul style="list-style-type: none"> ○ Light and easily digestible foods. ○ Adequate hydration. ○ Mizaj-based customization. ○ Foods and drinks to avoid. • Relate the discussion back to the case scenario and real-world applications. • Q&A session for clarifications.
NLHT15.4	Ma'mulāt-i-Maṭab of Ḥummayāt (Fever)	<p>Library Session → Discussion Forum → Group Presentation (120 mins)</p> <p>Activity Structure:</p> <p>I. Introduction (10 mins): Briefly introduce the concept of Ma'mulāt-i-Maṭab in the management of febrile conditions. Explain the objectives of the session:</p>

- Reviewing literature to understand the practices and principles used in Unani medicine for managing fevers.
- Developing skills in summarizing and presenting scientific findings.

II. Library Session (40 mins):

Step 1: Literature Review:

- Instruct students to search for books, research articles, and historical texts related to Ma'mulāt-i-Maṭāb of fevers in the library. Suggested sources: Classical Unani texts, recent research on fever management in Unani medicine, and comparative studies with modern fever management strategies.
- Provide students with a list of keywords for their search (e.g., ḥummayāt, Ma'mulāt-i-Maṭāb, Unani fever management, treatment of fever in Unani).
- Encourage students to take notes on key points: The principles of treatment in fevers. Common practices (e.g., diet, medicines, regeminal therapy). Historical and modern perspectives on managing fever.

Step 2: Annotated Bibliography Creation:

- After completing the literature review, students will create an annotated bibliography of the selected readings. For each text, they should: Provide a brief summary, Discuss its relevance to the management of fever in Unani medicine, Mention the clinical implications or applications of the text's teachings.
- Students should ensure their annotations are succinct, clear, and focused on key findings relevant to fever management.

III. Discussion Forum (30 minutes)

Step 1: Guided Discussion:

- After completing their annotated bibliographies, students will participate in a guided discussion in small groups.
- Each student will share one key finding from their research and its significance for clinical practice in managing fevers.
- The facilitator will ask thought-provoking questions to encourage critical thinking, such as:
 - How do different treatments in Ma'mulāt-i-Maṭab align with or differ from modern approaches to fever management?
 - What challenges might arise when applying these principles in a contemporary clinical setting?
 - How can the integration of Unani practices enhance the holistic management of fevers?

Step 2: Peer Learning:

- Students will respond to each other's findings and discuss alternative interpretations of Ma'mulāt-i-Maṭab practices.
- Each group will identify at least one area of Unani treatment that they believe could benefit from further exploration or evidence-based studies.

IV. Group Presentation Preparation (30 mins):

Step 1: Group Discussion and Presentation:

- Divide students into small groups (4-5 students per group).
- Each group will prepare a 5-7 minute presentation on their findings from the literature review. The presentation should focus on: Key aspects of

		<p>Ma'mulāt-i-Maṭab of fevers, The application of these practices in managing febrile conditions, The relevance of these practices in modern clinical settings.</p> <ul style="list-style-type: none"> • Encourage students to use visual aids (e.g., slides, diagrams) to make their presentations engaging and informative. <p>Step 2: Presentations:</p> <ul style="list-style-type: none"> • Groups will present their findings to the class, summarizing their research, discussing key points, and sharing the significance of Ma'mulāt-i-Maṭab in fever management. • Each presentation will be followed by a brief Q&A session where other students and the facilitator can ask clarifying questions. <p>V. Wrap-Up and Conclusion (10 mins)</p> <ul style="list-style-type: none"> • Summarize the key points discussed during the session, highlighting the importance of Ma'mulāt-i-Maṭab in Unani fever management. • Encourage students to reflect on how these ancient practices can be integrated with modern medical care for a more holistic approach to managing febrile conditions. • Open the floor for any final questions or thoughts.
NLHT15.5	Principles and Strategic Approaches for Managing Ḥummā Yawm	<p>Discussion → Role Play (120 mins)</p> <p>Activity Structure:</p>

I. Introduction (10 mins): Begin with a brief introduction to Ḥummā Yawm, explaining its classification, typical symptoms, and causes. Describe the key characteristics and Management Principles. Discuss key management strategies

II. Group Discussion (40 mins):

Step 1: Initial Brainstorming: Divide the class into small groups of 4–5 students. Each group is given the following questions to discuss:

- What are the key symptoms and signs of Ḥummā Yawm based on their types?
- What are the Unani principles behind the management of these types of fevers?
- Which foods and drinks would you recommend for a person suffering from Ḥummā Yawm?
- What medicines would you use to manage Ḥummā Yawm, and why?
- How would you address the lifestyle needs of a patient suffering from Ḥummā Yawm?

Step 2: Group Sharing:

- After brainstorming, each group shares their insights with the larger class, focusing on their proposed management strategies for Ḥummā Yawm.
- The facilitator adds clinical insights and clarifies misconceptions, guiding students to connect the discussed points to real-life scenarios.

III. Role Play (60 minutes):

Step 1: Role Play Preparation: Assign roles to students for the role play (e.g., doctor, patient, caregiver, family member). Provide the following case scenario for the role play:

Case Scenario: A 35-year-old male presents with intermittent fever for the past 5 days. He experiences high fever episodes, followed by profuse sweating and fatigue. He has a history of irregular diet, high intake of spicy foods, and minimal hydration. His current Mizāj (temperament) is Safravi. He is seeking treatment from a Unani practitioner.

Roles:

- **Doctor:** Explain the management principles for Ḥummā Yawm based on the type, provide dietary and therapeutic recommendations, and address the patient's concerns.
- **Patient:** Present symptoms, express concerns about treatment, and ask questions regarding the dietary changes and remedies suggested.
- **Caregiver/Family Member:** Support the patient, ask questions about lifestyle changes, and ensure the patient's compliance with treatment.
- **Facilitator:** Observe the role play, interject with clinical guidance when necessary, and summarize the strategies used.

Step 2: Role Play Execution:

- Each group will act out their role play in front of the class. The doctor will provide a full explanation of the management plan, detailing dietary modifications, herbal treatments, and lifestyle advice, while addressing the patient's concerns and the caregiver's role.

		<ul style="list-style-type: none"> • The role play will simulate a consultation where the doctor explains the Unani approach, focusing on empathy, clear communication, and appropriate management strategies. <p>Step 3: Group Reflection:</p> <ul style="list-style-type: none"> • After each role play, other students will provide feedback on how well the doctor presented the management plan. • The facilitator will guide a group reflection, discussing the effectiveness of communication, the application of Unani principles, and any areas of improvement in managing the case. <p>IV. Wrap-Up and Conclusion (10 minutes)</p> <ul style="list-style-type: none"> • Summarize the principles of management for Ḥummā Yawm and the strategies discussed during the session. • Reinforce the importance of customizing treatment based on Mizāj and individual needs. • Q&A: Open the floor for any final questions or clarifications on the treatment and management strategies for Ḥummā Yawm.
NLHT15.6	Management strategies for Buḥrān (Crisis)	<p>Library Session → Discussion (60 mins)</p> <p>1. Library Session (30 mins):</p> <ul style="list-style-type: none"> • Organize a library session where students explore various resources, including books, classical manuscripts, journals, and online databases, to gather information on the management strategies used for Buḥrān.

		<ul style="list-style-type: none"> Students will be assigned to research specific topics, such as historical treatments, contemporary practices, or case studies on Buḥrān management. <p>2. Discussion (30 mins):</p> <ul style="list-style-type: none"> Following the library session, facilitate a group discussion where students share their findings from the research. Each student or group can present key points from their research and engage in a dialogue about the effectiveness of different Tadbīr strategies, challenges encountered, and potential areas for further investigation.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP15.1	Fever Charting and Interpretation	<p>Demonstration → Case Based Learning → Role Play (120 mins)</p> <p>1. Demonstration (30 mins):</p> <ul style="list-style-type: none"> Temperature Measurement Techniques: The teacher demonstrates various methods of measuring body temperature (e.g., oral, axillary, rectal, tympanic) using different types of thermometers. Fever Chart Creation: The teacher creates a fever chart in real-time while taking temperature readings by showing how to plot temperature readings on a chart. Explain the significance of marking times and noting any additional symptoms. Discuss how to interpret the fever pattern as the chart is being developed.

2. Case-Based Learning Activity (60 mins):

- Present students with a series of case studies that include patients with different fever patterns.
- Divide students into small groups and assign each group a different case study.
- Students analyze their case, take note of temperature readings, and chart the fever patterns.
- Each group discusses potential diagnoses and management strategies based on the fever chart they created.
- Groups present their findings to the class, promoting collaborative learning and critical thinking.

3. Role Play Activity (30 mins):

- Students simulate a clinical encounter where one plays the role of a clinician and the other as a patient.
- The "clinician" takes the patient's temperature, records the readings, and discusses potential causes and management.
- After the role-play, students switch roles and repeat the exercise.
- Facilitate a discussion about the interactions and decision-making processes involved.
- Students role-play as healthcare professionals presenting their fever charts in a clinical meeting.
- Each student creates a fever chart based on a provided scenario.
- Students present their chart, explaining the fever pattern, associated clinical features, and possible diagnoses.
- Peers provide feedback and ask questions, simulating a real-world clinical discussion.

<p>NLHP15.2</p>	<p>Diagnostic and Management Approach to Undiagnosed Fevers</p>	<p>Case-Based Learning → Problem Based Learning (120 mins)</p> <p>1. Case-Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Case Presentation: Provide students with detailed patient scenarios describing various undiagnosed cases. Include pertinent history, physical examination findings, and initial lab results. • Group Analysis: Have students work in small groups to analyze the case, identify potential differential diagnoses, and discuss appropriate investigations and management plans. • Class Discussion: Facilitate a class discussion where each group presents their case analysis and proposed management plan. Encourage questions and constructive feedback from peers. <p>2. Problem-Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Problem Scenarios: Present students with real-world problems related to undiagnosed fevers, such as a patient with vague symptoms and no clear diagnosis. • Self-Directed Research: Allow students time to research the common causes of Fevers of Unknown Origin, diagnostic tests, and treatment options. They can use textbooks, journal articles, or online resources. • Group Solutions: Have students collaborate to propose a comprehensive management plan for the presented problem, including diagnostic strategies and potential therapies. <p>3. Role Play (Optional):</p>
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		<ul style="list-style-type: none"> • Simulated Patient Interactions: Assign students roles as either physicians or patients. Create a script for a simulated patient encounter where they discuss symptoms and medical history related to FUO. • Role Reversal: After the initial interaction, have students switch roles. This allows them to understand both perspectives—how to gather information as a physician and how to express concerns as a patient. • Feedback Session: After the role-playing, conduct a feedback session where students reflect on their experiences, discussing what strategies worked well and what could be improved in patient communication.
NLHP15.3	Differential Diagnosis of Common Fever Syndromes	<p>Case-Based Learning → Problem Based Learning (120 mins)</p> <p>1. Case Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Case Presentation: Introduce clinical cases representing various fever syndromes. Each case should include relevant history, symptoms, and preliminary lab findings. • Group Analysis: Divide students into small groups to analyze the cases. They will create differential diagnosis lists and identify key distinguishing features of each syndrome. • Class Discussion: Reconvene for a group discussion where each team presents their findings. Discuss the commonalities and differences in the fever syndromes. <p>2. Problem-Based Learning Activity (60 mins):</p> <ul style="list-style-type: none"> • Problem Scenarios: Provide different clinical scenarios of fever syndromes for analysis.

		<ul style="list-style-type: none"> • Collaborative Solutions: Students work together to develop differential diagnosis lists based on the scenarios and discuss how they arrived at their conclusions. • Presentation: Each group presents their findings to the class, highlighting distinguishing features of each fever syndrome. <p>3. Role Play (Optional):</p> <ul style="list-style-type: none"> • Simulated Encounters: Students act out scenarios where they interview "patients" (other students) presenting with fever-related symptoms. • Diagnosis Discussion: After the role-play, discuss as a class the diagnostic challenges faced and how to overcome them. • Feedback and Reflection: Facilitate a feedback session to reflect on the role-play experiences and how they contribute to the differential diagnosis process.
NLHP15.4	Nabz examination in febrile cases.	<p>Demonstration → Case Based Learning</p> <p>1. Demonstration (60 minutes):</p> <ul style="list-style-type: none"> • Begin by explaining the importance of the Nabz examination along with adila -i-Nabz. • Demonstrate the techniques of Nabz Examination • Show pulse points, measurement techniques, and assessment of pulse characteristics in fever patients • Address student questions • Encourage practice during guided sessions. <p>2. Case Based Learning (60 minutes):</p>

		<ul style="list-style-type: none"> • Divide students into small groups; provide different fever case scenarios • Analyze assigned cases focusing on Nabz findings • Groups present their findings and implications • Instructors provide feedback on discussions. <p>(Total Duration: 120 mins)</p> <p>3. Role Play (Optional):</p> <ul style="list-style-type: none"> • Assign students as healthcare providers or patients • Conduct Nabz examinations in pairs, with feedback after each role play • Discuss key learning points and feedback • Reinforce knowledge in a class discussion <p>4. Early Clinical Exposure (Optional):</p> <ul style="list-style-type: none"> • Brief on objectives before clinic visits. • Observe Nabz examinations in a OPD/IPD setting • Under supervision, allow students to practice Nabz examination. • Discuss experiences and challenges encountered (15-20 min).
NLHP15.5	Empathetic Fever Management	<p>Demonstration → Case-Based Learning (120 mins)</p> <p>1. Demonstration (60 mins):</p> <ul style="list-style-type: none"> • Present a case scenario involving a patient with fever. Demonstrate how to educate the patient on hydration, rest, and recognizing red-flag symptoms. • Use visual aids like charts or pamphlets to illustrate key points.

		<ul style="list-style-type: none">• Set up stations where students practice explaining fever management concepts to mock patients or peers.• Include activities like measuring fluid intake, explaining symptoms, and discussing the importance of rest.• Show a video of effective patient education techniques in practice. Discuss the communication strategies used by healthcare professionals in the video. <p>2. Case Based Learning (60 mins):</p> <ul style="list-style-type: none">• Divide students into small groups and provide them with a case study of a patient presenting with fever.• Have students discuss and present their approach to educating the patient about fever management, including hydration and recognizing red-flag symptoms.• Present different patient scenarios with varying complexities of fever. Ask students to identify educational needs.• Facilitate peer review sessions where they provide feedback to one another. <p>3. Role Play (Optional):</p> <ul style="list-style-type: none">• Pair students to role-play as patients and healthcare providers. One student acts as the patient with fever, while the other educates them on management strategies and red-flag symptoms.• Create scenarios where students must navigate challenging patient interactions, such as a patient reluctant to drink fluids. They must practice empathy and effective communication.
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		<ul style="list-style-type: none"> Organize a mock community health workshop where students present to a group (other students or faculty acting as community members) about fever management and answer questions.
NLHP15.6	Laboratory Interpretation of Fever	<p>1. Lab Report Interpretations (120 mins):</p> <ul style="list-style-type: none"> Present students with a series of lab reports related to fever cases. Each report should include CBC, ESR, CRP, LFTs, and renal function tests. Have students work in small groups to interpret the results, discuss their significance, and relate them to potential diagnoses. Conduct a session where students review actual lab reports and discuss the role of each test in diagnosing different types of fevers, including infectious and non-infectious causes. Facilitate discussions on the indications for specific tests like malaria smear, dengue serology, and Widal test based on presented clinical scenarios. Organize quizzes based on lab report interpretation, allowing students to apply their knowledge. Provide immediate feedback to reinforce learning. Have students create and present mock lab reports, including results and interpretations, to their peers, fostering discussion and critical thinking. <p>2. Early Clinical Exposure (Optional):</p> <ul style="list-style-type: none"> Arrange for students to join clinical rounds with attending physicians in a ward or outpatient setting. They can observe the correlation between patient symptoms, lab test orders, and results. Facilitate opportunities for students to shadow healthcare professionals who interpret lab results in clinical practice, providing insights into how these interpretations impact patient management.

		<ul style="list-style-type: none"> • After early clinical exposure activities, conduct reflection sessions where students discuss what they learned about the role of laboratory investigations in fever management. • Use simulated patients or case simulations where students must decide which lab tests to order based on presented symptoms and then interpret the results within a guided framework.
NLHP15.7	Dietary Plans for Patients with Fever	<p>Workshop →Team Project Work (4 hours)</p> <p>1. Workshop (120 mins):</p> <ul style="list-style-type: none"> • Conduct sessions on the principles of dietary management in fever, emphasizing Unani medicine. Use multimedia presentations to enhance engagement. • Present real-life scenarios of patients with fever and their dietary needs. Divide students into small groups to analyze the cases and design dietary charts based on Unani principles. • Students can role-play as healthcare providers and patients, simulating consultations where they discuss dietary recommendations and hydration strategies. • Provide templates for dietary charts. Have students create their own charts in pairs or small groups, incorporating nutritional requirements, specific food types, and hydration recommendations. • Organize sessions where students present their dietary charts to the class and receive constructive feedback from peers and instructors. <p>2. Team Project Work (120 mins):</p>

		<ul style="list-style-type: none"> • Form teams to research various aspects of dietary management for fever, focusing on different regimens within Unani medicine. Teams can present their findings to the class. • Teams can present their dietary charts to a panel (comprising instructors and peers), explaining their rationale, nutritional choices, and patient-centered considerations. • Conduct mock consultations where one group acts as healthcare providers and another as patients. They can use their dietary charts to guide discussions on nutrition and hydration. • After completing the activities, each team can maintain a reflective journal documenting their learning experiences, challenges faced, and insights gained regarding dietary management in fever.
NLHP15.8	Patient Education Materials for Effective Fever Management	<p>Workshop→Team Project Work (4 hours)</p> <p>1. Workshop (120 mins):</p> <ul style="list-style-type: none"> • Begin the workshop with a presentation that outlines the key components of effective patient education materials, including clarity, accessibility, and cultural sensitivity. • Discuss different formats (brochures, flyers, infographics, posters, videos) and their uses. • Divide students into small groups and assign each group a specific target audience (e.g., children, elderly, low literacy). • Provide them with templates and guidelines to design educational materials tailored to their audience. • After creating the materials, have groups present their work in a mock presentation format.

- Encourage peer feedback focusing on content clarity, visual appeal, and the appropriateness of the message for the intended audience.
- Conduct a session where groups exchange materials with another group for critique.
- Facilitate discussions on strengths and areas for improvement, focusing on evidence-based information and cultural sensitivity.

2. Team Project Work (120 mins):

- Instruct teams to outline a project plan that includes their goals, timeline, and roles for each team member.
- Encourage them to consider how their materials will be distributed and implemented in a clinical setting.
- Have each team research evidence-based practices for fever management and gather relevant statistics and information.
- Encourage them to compile this information and determine which pieces are most important for inclusion in their educational materials.
- Teams will work together to create comprehensive patient education materials (e.g., pamphlets, posters, videos) based on their research and discussions.
- Encourage creativity, allowing teams to use various multimedia tools to enhance their materials.
- Conclude the project with formal presentations of their materials to the class or a panel of faculty members.
- Use a rubric for evaluation that includes criteria like content accuracy, clarity, creativity, and effectiveness in promoting patient understanding.

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
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Topic 16 Respiratory System Part 1: نزله وسعال Nazla wa Su'āl (Catarrh and Cough) (LH : 2, NLHT: 1, NLHP: 0 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define Nazla and describe its types, causes clinical features, diagnosis and differential diagnosis. Also differentiate between Nazla and zukam	CK	MK	K	L&PPT , L	CR-W, S- LAQ	F&S	1	-	LH
CO1, CO3	Explain types, causes, clinical features, diagnosis and differential diagnosis of Sual.	CC	MK	K	L&PPT , L, DIS	P-VIVA, S- LAQ, T-CS, CL-PR	F&S	1	-	LH
CO1	Discuss the principles of management, management and mamulate-matab of Nazla and Sual	CK	MK	K	FC, CBL	CBA, S-LAQ, P-VIVA, T- CS	F&S	1	-	NLHT16.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT16.1	Formulating a Treatment Plan for different types of Nazla wa Su'āl	<p>1. Case-Based Learning (30 minutes)</p> <p>Present a detailed case study of patients suffering from different types of Nazla wa Sual with specific symptoms and challenges. Students work in groups to analyze different cases and formulate a comprehensive Unani treatment plan, incorporating dietary modifications according to their diagnosis.</p> <p>2. Flipped Classroom (30 minutes)</p>

		Assign preparatory reading materials on the Unani principles for nazla wa zukam before the class. In the actual session, instead of lecturing, facilitate discussions where students apply what they have learned. They can be tasked with developing and presenting their treatment plans for different case scenario's. (Total Duration: 60 mins)
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
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Topic 17 Respiratory System Part 2: داء انسداد الرئيه Dā Insidād al Ri'a (Obstructive Pulmonary Disease) (LH : 4, NLHT: 2, NLHP: 8 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define COPD and explain the etiopathogenesis of Chronic Bronchitis and Emphysema. Enumerate the risk factors, causes, clinical features, and complications of COPD.	CC	MK	K	L&PPT , L	S-LAQ, T-CS, CBA	F&S	1	-	LH
CO1	Describe principles of management and management of COPD including the preventive measures with a special emphasis on Ilaj Bit Tadbeer.	CAN	MK	KH	DIS, L, LS	P-VIVA, S-LAQ, T-CS	F&S	1	-	LH
CO1	Define Bronchial Asthma and discuss its classification, causes, clinical features and complications in the light of Unani concepts and recent advances.	CC	MK	K	L&GD, L&PPT	S-LAQ	F&S	1	-	LH
CO1	Demonstrate the ability to develop a comprehensive understanding of principles of management and management of Asthma including pharmacological interventions and Regimenal therapy	CS	MK	KH	PBL, RP, CBL, FC, SIM	CBA, P-VIVA, S-LAQ	F&S	1	-	NLHT17.1
CO1	Define Bronchiectasis, describe its types, risk factors, etiopathogenesis, clinical features and complications.	CK	MK	K	L&PPT , L	P-VIVA, S-LAQ	F&S	1	-	LH

CO3	Perform and interpret spirometry using correct technique	PSY-MEC	MK	SH	CBL, SIM	TR, P-EXAM, P-VIVA	F&S	1	-	NLHP17.1
CO3	Demonstrate the ability to Perform nebulisation with correct technique with NS in IPD patients/ simulated patients	PSY-MEC	MK	SH	SIM, CBL	P-EN, P-EXAM, SP, CBA	F&S	1	-	NLHP17.2
CO2, CO3, CO6	Elicit, document and present detailed history and perform & demonstrate examination of patients/ simulated patients with obstructive lung disease and formulate the differential diagnosis and treatment plan	PSY-MEC	MK	SH	PL, FC, SDL	PA, P-VIVA, SA, P-EXAM	F&S	1	-	NLHP17.3
CO2, CO5	Demonstrate the ability to counsel patient with obstructive pulmonary disease for cessation of smoking while showing empathy for difficulties faced by patients during smoking cessation	AFT-VAL	DK	SH	D-BED, RP, CBL	P-RP, CBA	F&S	1	-	NLHP17.4

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT17.1	Holistic Management of <u>Ḍīq</u> al-Nafas Shu'abi (Bronchial Asthma)	<p>1. Role Play (30 minutes):</p> <p>Divide students into groups, where one group plays the role of patients presenting with symptoms of Asthma, and another group play the role of Unani physicians. The physicians will conduct consultations, diagnose Asthma based on clinical symptoms, and develop a comprehensive treatment plan incorporating dietary modifications, lifestyle changes, and dietary refrains.</p> <p>2. Simulation (30 minutes):</p>

Conduct a simulation exercise where students diagnose and treat a simulated patient with Asthma. They will perform steps like taking a detailed patient history, examining the respiratory system, and offering a comprehensive Unani treatment plan. They will utilize tools such as treatment protocols based on Ilāj bi'l Taghdiya (dietary therapy), Ilāj bi'l Tadbīr (regimen therapy), and psychotherapeutic interventions.

(Total Duration: 60 mins)

3. Flipped Classroom (optional)

Assign preparatory reading materials on the Unani principles of treating Asthma before the class. In the actual session, instead of lecturing, facilitate discussions where students apply what they have learned. They can be tasked with developing and presenting their treatment plans for Asthma, integrating dietary and psychotherapeutic approaches.

4. Case-Based Learning (optional):

Present a detailed case study of a patient suffering from Asthma with specific symptoms and challenges.. Students work in groups to analyze the case, diagnose the condition, and formulate a comprehensive Unani treatment plan, incorporating dietary modifications, lifestyle changes, and psychotherapeutic approaches.

5. Problem-Based Learning (optional):

Pose a clinical problem to the students: "A patient presents with chronic Asthma that has not responded to previous treatments. How would you develop a comprehensive Unani-based treatment plan?" Students work in teams to research

		<p>the causes, treatment modalities, and preventative strategies for Asthma, culminating in the development of an individualized, holistic treatment approach.</p> <p>Follow-Up Discussion: After the activities, hold a debriefing session where students share their experiences, discuss challenges they faced during role plays or simulations, and review the treatment plans developed during CBL and PBL activities.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP17.1	Correct technique to perform spirometry and interpretation of Pulmonary function test	<p>1. Simulation (60 minutes):</p> <p>Conduct a simulation exercise where few students become simulated patients of Obstructive pulmonary diseases and rest of students perform spirometry on them under the guidance of trainer thereby doing pulmonary function test. This will provide a hands-on opportunity to practice.</p> <p>2. Case based learning (60 minutes):</p> <p>In the follow up patients of compromised pulmonary function test the spirometry is performed by the student under the guidance of trainer. This will provide a hands-on opportunity to practice in clinical setting</p> <p>(Total duration 120 minutes)</p>
NLHP17.2	Correct technique to perform nebulisation	<p>1. Simulation (60minutes):</p> <p>In the aerosol therapy or nebulisation section of clinical skill lab conduct a simulation exercise where few students become simulated patients of Obstructive</p>

		<p>lung diseases and rest of students perform nebulisation on them under the guidance of trainer This will provide a hands-on opportunity to practice.</p> <p>2. Case based learning (60minutes):</p> <p>In the IPD patients of Obstructive lung diseases or chest congestion the nebulisation can be performed by the student under the guidance of trainer. This will provide a hands-on opportunity to practice in clinical setting.</p> <p>(Total Duration: 120 mins)</p>
NLHP17.3	<p>Case presentation of Dā Insidād al Ri'a (Obstructive Pulmonary Disease)</p>	<p>1. Self-Directed Learning (60 minutes)</p> <ul style="list-style-type: none"> • Ask students to independently review detailed case studies of patients with Obstructive Pulmonary Disease, focusing on history, examination findings, and management. They document key points and questions, which they'll discuss later in a guided session. • Assign research articles, guidelines, and textbook chapters specific to Obstructive Pulmonary Disease, including clinical presentations, physical signs, and management options. Students create summaries or concept maps to organize their understanding. • Students write up two fictional or real case histories, documenting all sections of history-taking, examination findings, differential diagnosis, and treatment planning. Faculty provide feedback, and students can use this for later presentations. <p>2. Peer Learning (60 minutes)</p> <ul style="list-style-type: none"> • In pairs or small groups, students take turns presenting cases to each other, simulating a full case presentation with differential diagnosis and treatment plan. Peers then provide structured feedback, focusing on

		<p>presentation clarity, clinical reasoning, and thoroughness of the differential diagnosis.</p> <ul style="list-style-type: none"> • Students are assigned specific topics related to Obstructive Pulmonary Disease (e.g., Chronic Bronchitis, Emphysema, Asthma, Bronchiectasis) to research and then teach to peers in an interactive format, such as a mini-presentation or Q&A session. This reinforces knowledge and builds confidence. • In groups, students take turns playing the roles of patient, doctor, and observer. The "doctor" conducts history-taking and an examination on a peer acting as a patient, while the observer provides feedback on both clinical skills and bedside manner. <p>(Total Duration: 120 minutes)</p> <p>3. Flipped Classroom (optional)</p> <ul style="list-style-type: none"> • Prior to class, students watch pre-recorded lectures covering core concepts of pleural disease, such as pathophysiology, examination techniques, and management approaches. They also review prepared case scenarios and come to class ready to discuss them in depth. • In class, students work in small groups to analyze and present the cases they prepared beforehand, focusing on their diagnostic reasoning and treatment plan. Faculty guide discussions, emphasizing key learning points and providing feedback on each group's approach. • Students participate in mock rounds where each group presents their case to the entire class, simulating real clinical rounds. Faculty provide feedback on differential diagnoses, examination findings, and treatment plans, fostering an environment for collaborative learning. • To reinforce learning, students complete in-class quizzes based on the pre-class material, followed by group problem-solving exercises where
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		<p>they apply their knowledge to case-based questions and scenarios.</p> <p>Faculty provide guidance to clarify concepts as needed.</p>
<p>NLHP17.4</p>	<p>Counselling a Patient with Dā Insidād al Ri'a (obstructive pulmonary disease) for smoking cessation.</p>	<p>1. Role Play (60 minutes)</p> <p>Role Play Setup (10 minutes): One student plays the role of the doctor, and another plays the patient with symptoms suggestive of obstructive pulmonary disease. Provide students with patient case details (symptoms such as breathlessness, cough with sputum).</p> <p>A. Role Play Execution (30 minutes):</p> <ul style="list-style-type: none"> • The “counsellor” uses techniques like active listening, empathy, and guided conversation to understand the patient’s emotional state and offer appropriate advice to stop smoking <p>B. Discussion and Feedback (20 minutes):</p> <ul style="list-style-type: none"> • The instructor and peers provide feedback on the quality of history taking, exploration of symptoms, and patient communication. <p>2. Case-Based Discussion (60 minutes)</p> <p>Students are provided with case scenarios of patients with obstructive pulmonary disease who are chronic smoker and asked to develop counselling plans based on the patient's history and symptoms. They must propose communication strategies in this regard.</p> <p>Steps:</p>

		<ul style="list-style-type: none"> • Phase 1: Present cases (e.g., a patient with breathlessness, cough with sputum). • Phase 2: Groups discuss the diagnosis and and management of the disease • Phase 3: Each group propose communication strategies in this regard in class discussion. <p>(Total Duration: 120 minutes)</p>
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Topic 18 Respiratory System Part 3: تعديبه نظام تنفس Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System) (LH : 4, NLHT: 2, NLHP: 10 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe the Unani Concept of Pneumonia and discuss its classification, causes, clinical features, principles of management	CK	MK	K	L&GD, L&PPT, L	T-CS, CBA, S-LAQ	F&S	1	-	LH
CO1	Discuss the classification, risk factors, causes, etiopathogenesis of pneumonia and its management guidelines	CC	MK	K	L&PPT, L&GD, L	T-CS, T-OBT, S-LAQ	F&S	1	-	LH
CO3, CO4	Recognize the clinical features & pathological stages of pneumonia. Formulate the differential diagnosis and suggest relevant investigations. Discuss its prognosis including indications for referral to ITU.	CC	DK	K	CBL, SDL, PL	CBA, PA, PRN, CL-PR	F&S	1	-	NLHT18.1
CO3	Demonstrate the ability to interpret Complete Blood Count (CBC) and Arterial Blood Gas (ABG) reports, as well as Chest X-ray PA views, in the context of respiratory diseases, including the identification of key abnormalities, differential diagnoses, and implications for patient management.	PSY-GUD	MK	KH	CBL, PBL	SP, P-EXAM, CL-PR, P-VIVA, CBA	F&S	1	V-MA	NLHP18.1

CO3	Demonstrate the ability to interpret sputum Gram stain and Acid-Fast Bacillus (AFB) stain results in patients with respiratory diseases, differentiating the types of infections and discussing implications for diagnosis and treatment.	PSY-GUD	MK	KH	CBL, PBL	P-EXAM, CBA, P-VIVA	F&S	1	V-MA	NLHP18.2
CO1	Describe Unani concept of Tuberculosis including Madda silliya, and explain its pathogenesis, causes and clinical features	CK	MK	K	L&GD, L&PPT, L	T-OBT, T-CS	F&S	1	-	LH
CO1	Explain the principles of management and management of pulmonary tuberculosis including dietotherapy, refrainment and important instructions in light of classical Unani concepts.	CK	MK	K	L, L&GD, L&PPT	T-CS, S-LAQ, T-OBT	F&S	1	-	LH
CO3	Discuss tuberculosis highlighting its classification clinical features, complications, investigations, differential diagnosis, management and treatment regimens in special situation	CC	MK	K	L&PPT, L&GD	P-EXAM, P-VIVA	F&S	1	-	NLHT18.2
CO2	Demonstrate the ability to communicate empathically with patients and their family about the diagnosis and therapy Ta'diya Niẓām-i-Tanaffus (Infections of Respiratory System)	AFT-VAL	DK	SH	CBL, RP	P-RP, CBA, P-EXAM, P-VIVA	F&S	1	-	NLHP18.3
CO2, CO3, CO6	Elicit document and present detailed history and perform & demonstrate the examination of patients/ simulated patients with infections of the respiratory system, formulate the differential diagnosis and treatment plan	PSY-GUD	MK	SH	CBL, PBL	P-VIVA, OSCE, P-EXAM, VV-Viva, P-CASE	F&S	1	-	NLHP18.4
CO1	Develop a comprehensive understanding of holistic concept of lung abscess using principles of management of	CAP	DK	KH	L&GD, L&PPT	360D, S-LAQ, PA,	F&S	1	-	NLHT18.3

	Unani medicine and recent advances including physiotherapy, postural drainage, intercostal tube drainage and surgical management options.					VV-Viva, PRN				
Non Lecture Hour Theory										
S.No	Name	Description of Theory Activity								
NLHT18.1	Differential diagnosis of Dhāt al-Ri'a (Pneumonia) on the basis of clinical features and investigations	<p>1. Self-Directed Learning (Duration:- 30-45 mins)</p> <ul style="list-style-type: none"> Assign students to complete an online course that includes video lectures, quizzes, and case scenarios related to pneumonia. They can review clinical presentations, stages of pneumonia, and indications for ITU referral. Students research specific topics such as the pathological stages of pneumonia, differential diagnoses, and the role of various investigations. They prepare a summary or concept map to share during class discussions. Provide a selection of case studies with varying presentations of pneumonia. Students independently analyze the cases, identifying clinical features, stages, and potential differential diagnoses. <p>2. Peer Learning (optional)</p> <ul style="list-style-type: none"> Assign students different aspects of pneumonia (e.g., clinical features, investigations, prognosis). Each student researches their topic and presents it to the group, promoting discussion and peer feedback. Divide students into small groups and provide them with a clinical case of pneumonia. Each group discusses the case to identify clinical features, stages, and differential diagnoses, ultimately presenting their findings to the class. 								

		<ul style="list-style-type: none"> • Students role-play scenarios where one acts as a patient presenting with pneumonia symptoms, and the others conduct a history and physical examination. This fosters collaborative learning and highlights the importance of clinical features. • In pairs, students review and discuss a set of investigation reports related to pneumonia cases. They identify relevant findings and assess their significance in terms of prognosis and potential referrals. <p>3. Case-Based Learning (optional)</p> <p>Faculty present a clinical case of pneumonia and facilitate a guided discussion. Students identify clinical features, differentiate from other conditions, discuss appropriate investigations, and decide on management strategies, including indications for ITU referral.</p>
NLHT18.2	Sil (Pulmonary Tuberculosis) concept and management	<p>1. Lecture and Power point Presentation (Duration:- 30-45 mins)</p> <p>After the presentation on Tuberculosis concept and management, divide students into small groups to discuss concept and management of tuberculosis</p> <p>2. Lecture and Group Discussion (Optional)</p> <p>Organize a fishbowl discussion where a small group discusses the concept and management of tuberculosis while the rest of the class observes. Afterward, the observers can provide feedback and contribute their perspectives.</p>
NLHT18.3	Concept and management of Dubayla al- Ri'a (Lung Abscess)	<p>1. Lecture and Power Point Presentation (Duration:- 30-45 mins)</p> <ul style="list-style-type: none"> • Use engaging PowerPoint presentations to outline the pathophysiology, clinical features, and management options for lung abscesses. Incorporate visuals such as diagrams, videos, and case studies to

		<p>illustrate Unani medicine principles alongside modern treatment strategies. Encourage students to participate by asking questions and discussing the content during the lecture.</p> <ul style="list-style-type: none">• Present case studies using PowerPoint slides that detail patients with lung abscesses. Each case should include the patient's history, examination findings, and treatment approaches from both Unani and contemporary medicine. Facilitate discussions after each case to explore different management options and encourage critical thinking among students.• Create a PowerPoint presentation that includes video demonstrations of techniques such as physiotherapy interventions, postural drainage, and intercostal tube drainage. Discuss the indications, contraindications, and expected outcomes of these interventions, allowing students to visualize the practical applications of their learning. <p>2. Lecture and Group Discussion (Optional)</p> <ul style="list-style-type: none">• After the lecture, organize students into small groups to discuss specific topics related to lung abscess management, such as the effectiveness of Unani remedies compared to modern surgical techniques. Each group can present their conclusions to the class, fostering an environment of peer learning and diverse perspectives.• Select key topics such as the role of physiotherapy in lung abscess recovery or the importance of nutritional support in Unani medicine. Facilitate discussions around these topics after the lecture, allowing students to explore the integration of traditional and modern practices. Provide guiding questions to stimulate conversation.• Assign students to research recent advances in the management of lung abscesses, including surgical techniques and physiotherapy approaches. Students prepare PowerPoint presentations summarizing
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		<p>their findings and lead discussions in class. This activity encourages students to critically evaluate current practices and their alignment with Unani principles.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP18.1	Interpretation of CBC&ABG report and Chest X ray PA view in respiratory diseases	<p>1. Case-Based Learning (60 minutes)</p> <ul style="list-style-type: none"> • Present a clinical case of a patient with respiratory symptoms (e.g., COPD exacerbation, pneumonia). Provide students with the relevant CBC, ABG reports, and chest X-ray PA view. Students discuss in small groups to interpret the findings, formulate differential diagnoses, and propose a management plan. After the discussion, groups share their interpretations and management plans with the class for feedback and further discussion. • Present a series of cases that show different stages of a respiratory disease (e.g., early-stage pneumonia vs. late-stage). Each case includes updated CBC, ABG, and chest X-ray results. Students analyze how the interpretation of these results changes with the progression of the disease and discuss the implications for treatment. <p>2. Problem-Based Learning (60 minutes)</p> <ul style="list-style-type: none"> • Provide students with a problem scenario, such as a patient presenting with acute respiratory distress. Students work in groups to gather relevant data (e.g., history, physical examination findings) and are then given CBC, ABG, and chest X-ray results to interpret. They must identify the primary issue, differential diagnoses, and propose an investigation and management plan based on their findings.

		<ul style="list-style-type: none"> • Present a complex case involving multiple respiratory conditions (e.g., a patient with COPD and pneumonia). Students analyze the CBC, ABG, and chest X-ray results to determine the root causes of the patient's symptoms. They then discuss how to address each issue through management strategies, highlighting how different interpretations lead to varying treatment approaches. • After completing PBL cases, hold reflection sessions where students assess their own and peers' interpretations of the data. They discuss what was effective, what could be improved, and how their interpretations might change with additional information or in real-life situations. <p>(Total Duration: 120 mins)</p>
NLHP18.2	Interpret sputum gram stain and AFB	<p>1. Case-Based Learning (60 minutes)</p> <ul style="list-style-type: none"> • Present a clinical case of a patient with respiratory symptoms (e.g., suspected pneumonia or tuberculosis). Provide students with the clinical background, sputum Gram stain, and AFB stain results. Students discuss in small groups to interpret the findings and propose a diagnosis and management plan. Each group shares their interpretations with the class for feedback. • Present cases that illustrate different types of respiratory infections (e.g., bacterial pneumonia vs. tuberculosis). Include relevant sputum Gram stain and AFB stain results for each case. Students analyze how the interpretations vary with the type of infection and discuss the clinical implications of their findings. <p>2. Problem-Based Learning (60minutes)</p> <ul style="list-style-type: none"> • Provide students with a clinical scenario of a patient presenting with chronic cough and sputum production. Students work in groups to gather

		<p>relevant history and examination findings. They then interpret sputum Gram stain and AFB results and propose an investigation and management plan.</p> <ul style="list-style-type: none"> • Present a complex case involving multiple respiratory infections (e.g., a patient with both bacterial pneumonia and suspected tuberculosis). Students analyze the sputum Gram stain and AFB results to determine the root causes of the symptoms and discuss how to address each infection through appropriate management strategies. • After completing PBL cases, hold reflection sessions where students assess their own and peers' interpretations of the sputum stains. They discuss what was effective, what could be improved, and how their interpretations might change with additional information or in real-life situations. <p>(Total Duration: 120 mins)</p>
NLHP18.3	<p>Communicate with Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System) patients and family in an empathetic manner</p>	<p>1. Role Play (Patient History Taking and Communication)</p> <p>Duration: 60 minutes</p> <p>Role Play Setup (10 minutes): One student plays the role of the doctor, and another plays the patient with symptoms suggestive of tuberculosis . Provide students with patient case details (symptoms such as weight loss, haemoptysis or fever).</p> <p>A. Role Play Execution (30 minutes):</p> <ul style="list-style-type: none"> • The "doctor" asks focused questions related to tuberculosis and gathers relevant medical history (e.g., family history, medications, stress/infections).

		<ul style="list-style-type: none"> • Emphasize empathetic communication and addressing patient concerns. <p>B. Discussion and Feedback (20 minutes):</p> <ul style="list-style-type: none"> • The instructor and peers provide feedback on the quality of history taking, exploration of symptoms, and patient communication. <p>2. Case-Based Discussion (60minutes)</p> <p>Students are provided with case scenarios of patients with the history symptoms and diagnosis of tuberculosis.</p> <p>Steps:</p> <ul style="list-style-type: none"> • Phase 1: Present cases (e.g., a patient with weight loss, cough, haemoptysis or fever). • Phase 2: Groups discuss the diagnosis and and management of the disease • Phase 3: Each group propose communication strategies in this regard in class discussion. <p>(Total Duration: 120 minutes)</p>
NLHP18.4	Case presentation of patients with Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System	<p>1. Case-Based Learning (120 minutes)</p> <ul style="list-style-type: none"> • Students are assigned to gather detailed histories and perform examinations of two in-patient or simulated patients with respiratory infections (e.g., pneumonia, bronchitis). Each student presents their cases to the group, including relevant findings, differential diagnoses, and treatment plans. Peers provide constructive feedback, focusing on clarity, depth of analysis, and proposed management strategies.

		<ul style="list-style-type: none"> • Present a series of cases involving different respiratory infections. Each case includes patient histories, examination findings, and laboratory results. Students analyze the cases in small groups, discussing differential diagnoses and treatment plans for each patient, followed by a class discussion to compare approaches and outcomes. <p>2. Problem-Based Learning (120 minutes)</p> <ul style="list-style-type: none"> • Provide students with scenarios of two patients presenting with respiratory infections, each with unique histories and examination findings. Students work in groups to gather relevant data, develop differential diagnoses, and propose comprehensive treatment plans. This process helps them practice clinical reasoning and application of knowledge in real-life situations. • Present complex cases where patients have overlapping respiratory infections (e.g., pneumonia with a coexisting viral infection). Students analyze the clinical data, histories, and examinations to determine the root causes of the patients' symptoms. They then discuss differential diagnoses and how each diagnosis affects treatment strategies. • After completing PBL cases, organize reflection sessions where students assess their own and their peers' case presentations. Discussions focus on the strengths and weaknesses of their presentations, differential diagnoses, and treatment plans, fostering a culture of continuous improvement and collaborative learning. <p>(Total Duration: 240 mins)</p>
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Topic 19 Respiratory System Part 4: تنفسي وسنڌرم حار Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome) (LH : 1, NLHT: 2, NLHP: 0 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
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CO1	Explain ARDS and its three phases. Also Identify the clinical settings associated with the development of ARDS	CK	MK	K	L, L&PPT , L&GD	VV-Viva, CL- PR	F&S	1	-	LH
CO3	Recognize the clinical features, investigations and diagnostic criteria for ARDS and acute lung injury	CC	MK	K	PL, SDL, FC	PA, VV-Viva, SA	F&S	1	-	NLHT19.1
CO3, CO4	Discuss the management approaches for ARDS, including ventilatory support, oxygen therapy, and the importance of fluid management	CC	MK	KH	PL, SDL, FC	VV-Viva, SA, PA, C-INT, CBA	F&S	1	-	NLHT19.2

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT19.1	Clinical features investigations and diagnostic Criteria for Tanaffusī Dastaras Sindram Ḥād (ARDS) and acute lung injury	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation</p> <ul style="list-style-type: none"> Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, diagnostic criteria, treatment protocols) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> Instructor clarifies key concepts and addresses questions arising from the pre-class materials. Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. Groups present their findings and discuss different approaches to solving problems.

		<ul style="list-style-type: none"> • Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (Optional)</p> <p>Students independently explore management approaches for ARDS, which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (Optional)</p> <p>Collaborative group work where students can discuss and teach each other management approaches for ARDS</p>
NLHT19.2	<p>Management approaches for Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome)</p>	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation</p> <ul style="list-style-type: none"> • Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, diagnostic criteria, treatment protocols) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> • Instructor clarifies key concepts and addresses questions arising from the pre-class materials. • Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> ○ Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges.

		<ul style="list-style-type: none"> ○ Groups present their findings and discuss different approaches to solving problems. ● Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (Optional)</p> <p>Students independently explore management approaches for ARDS, which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (Optional)</p> <p>Collaborative group work where students can discuss and teach each other management approaches for ARDS</p>
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
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Topic 20 Respiratory System Part 5: سرطان شعبتي الرية Saraṭān Shu‘ab al-Ri’a (Bronchial Carcinoma) (LH : 1, NLHT: 1, NLHP: 2 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Explain bronchial carcinoma and its common types, predisposing factors and clinical symptoms including thoracic and extra thoracic manifestations and management strategies	CK	DK	K	L&PPT , L	CL-PR, VV-Viva, QZ	F&S	1	-	LH
CO3	Describe the basic diagnostic tools used in identifying bronchial carcinoma, including imaging techniques like X-rays and CT scan, as well as biopsy.	CC	NK	KH	FC, SDL	CL-PR, SA, VV-Viva	F&S	1	-	NLHT20.1

CO3	Demonstrate the ability to Interpret USG, CT & MRI thorax films and reports.	PSY-SET	DK	SH	LRI	VV-Viva, PA, OSCE, QZ	F&S	1	-	NLHP20.1
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT20.1	Diagnostic tools used in identifying Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma)	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation</p> <ul style="list-style-type: none"> Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, diagnostic criteria, treatment protocols) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> Instructor clarifies key concepts and addresses questions arising from the pre-class materials. Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. Groups present their findings and discuss different approaches to solving problems. Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (Optional)</p>

		<p>Students independently explore management approaches for ARDS, which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning(Optional)</p> <p>Collaborative group work where students can discuss and teach each other management approaches for ARDS</p>
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP20.1	Interpretation of USG, CT & MRI thorax films and reports	<p>1.Lab Report interpretation (120 minutes)</p> <ul style="list-style-type: none"> Faculty prepares a set of case studies, each including imaging reports from USG, CT, and MRI thorax scans along with the actual images. Divide students into small groups and assign each group a different case study. Students will read the imaging report carefully and compare it with the corresponding images, identifying key findings, discrepancies, and areas needing clarification. Each group presents their analysis to the class, highlighting the report's accuracy and any misinterpretations they identified.

Topic 21 Respiratory System Part 6: داء الریه معاشی Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases) (LH : 1, NLHT: 2, NLHP: 0 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define, Classify and differentiate various types of occupational lung diseases. Also enumerate the key risk factors.	CC	DK	KH	L, L&GD, L_VC	P-POS, CL- PR, VV-Viva, QZ	F&S	1	-	LH

CO1	Describe the pathophysiological changes in the lungs and the resultant clinical features, including progressive respiratory symptoms in occupational lung diseases.	CC	DK	KH	PL, FC, SDL	SA, CL-PR, Log book, PA, VV-Viva	F&S	1	-	NLHT21.1
CO1, CO5	Outline the basic principles of prevention and management of Occupational Lung Diseases incorporating approaches of Unani medicine for respiratory health including changes in Asbāb Sitta Ḍarūriyya and describe the mamulat-e-matab aimed at improving lung function and promoting overall respiratory well-being.	CC	NK	KH	PL, FC, SDL	VV-Viva, Log book, PA, CL-PR	F&S	1	-	NLHT21.2

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT21.1	Pathophysiology and clinical features of Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation (Duration: 1-2 hours)</p> <ul style="list-style-type: none"> Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, Pathophysiology and clinical features) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> Instructor clarifies key concepts and addresses questions arising from the pre-class materials. Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> Analyze 2-3 patient cases, focusing on Pathophysiology and clinical features of occupational lung diseases

		<ul style="list-style-type: none"> ○ Groups present their findings and discuss different approaches to solving problems. ● Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (optional)</p> <p>Students independently explore Pathophysiology and clinical features of occupational lung diseases, which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (optional)</p> <p>Collaborative group work where students can discuss and teach each other Pathophysiology and clinical features of occupational lung diseases</p>
NLHT21.2	Prevention and management of Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)	<p>1. Flipped Classroom Activities</p> <p>Phase 1: Pre-Class Preparation</p> <p>Assign pre-class readings, videos, and infographics on OLD and its Unani management. Include materials covering Unani lifestyle recommendations, diet changes, and specific Mamulat-e-Matab practices for respiratory health.</p> <p>Phase 2: In-Class Discussion (Duration :60 mins)</p> <ul style="list-style-type: none"> ● Instructor clarifies key concepts and addresses questions arising from the pre-class materials.

- After reviewing the pre-class materials, students can work in groups to apply these principles by creating comprehensive patient management plans, incorporating both prevention and treatment of OLD using Unani methods.
- Present students with a simulated patient case during class and have them collaboratively apply their understanding of Unani medicine's approach to OLD prevention, focusing on individualized recommendations around Asbāb Sitta Ḍarūriyya, lifestyle changes, and respiratory exercises to promote lung function.
- Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning.

(Total Duration: 60 mins for in-Class Session)

2. Self-Directed Learning (optional)

- Ask students to explore Unani concepts related to respiratory health, focusing on prevention and management of OLD, and prepare a short report on traditional Unani practices aimed at enhancing lung health.
- Provide case studies of patients with OLD and ask students to outline preventive and treatment strategies based on Unani approaches, including changes in lifestyle, Asbāb Sitta Ḍarūriyya (e.g., diet, environment, sleep patterns), and Mamulat-e-Matab for respiratory well-being.
- Have students compile and annotate a list of research articles and classical Unani texts that discuss the application of Unani principles in managing respiratory diseases like OLD.

3. Peer Learning (optional)

		<ul style="list-style-type: none"> • Divide students into small groups and assign each group a specific aspect of Asbāb Sitta Ḍarūriyya (e.g., food and drink, air, sleep and wakefulness) and its impact on respiratory health. Each group will discuss, prepare, and present their findings, focusing on changes that promote respiratory well-being. • Arrange role-play scenarios where students take turns being the physician and patient, practicing how they would explain the Unani-based preventive and therapeutic strategies for OLD, focusing on lifestyle modification. • Encourage students to research Unani Mamulat e Matab for respiratory problems and then teach their peers about the mechanisms, benefits, and preparation of these remedies.
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
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Topic 22 Respiratory System Part 7: امراض جنب Amrāḍ-i-Janb (Diseases of Pleura) (LH : 2, NLHT: 1, NLHP: 2 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe the Unani Concept of pleurisy along with its classification, causes, clinical features, diagnosis and complications	CC	MK	K	L&PPT , L&GD	S-LAQ, CL-PR	F&S	1	-	LH
CO1, CO3	Describe etiopathogenesis, clinical features, complications, differential diagnosis and investigations of Pleural effusion, Haemothorax and Pneumothorax along with management strategies	CK	MK	KH	L&PPT , L&GD	M-POS, S-LAQ, CL-PR	F&S	1	-	LH

CO1, CO3	Demonstrate the ability to develop a comprehensive understanding of holistic management plan for Pleural diseases using principles of Unani medicine including dietary modifications and lifestyle changes.	CS	MK	KH	PL, FC, SDL	PA, VV-Viva, Log book, CL-PR	F&S	1	-	NLHT22.1
CO2, CO3, CO6	Elicit, document and present detailed history and perform & demonstrate examination of patients/ simulated patients with diseases of pleura and formulate the differential diagnosis and treatment plan	PSY-MEC	MK	KH	PL, SDL, FC	Log book, SA, CL-PR, PA, VV-Viva	F&S	1	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT22.1	Management plan for Amrāḍ-i-Janb (Diseases of Pleura)	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation (Duration: 1-2 hours)</p> <ul style="list-style-type: none"> Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case framework, diagnostic criteria, treatment protocols) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> Instructor clarifies key concepts and addresses questions arising from the pre-class materials. Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. Groups present their findings and discuss different approaches to solving problems.

		<ul style="list-style-type: none"> Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (optional)</p> <p>Students independently explore management plan for Pleural diseases, which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (optional)</p> <p>Collaborative group work where students can discuss and teach each other management plan for Pleural diseases</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP22.1	Case presentation of Amrāḍ-i-Janb (Diseases of Pleura)	<p>1. Self-Directed Learning (60 minutes):</p> <ul style="list-style-type: none"> Ask students to independently review detailed case studies of patients with pleural diseases, focusing on history, examination findings, and management. They document key points and questions, which they'll discuss later in a guided session. Assign research articles, guidelines, and textbook chapters specific to pleural diseases, including clinical presentations, physical signs, and management options. Students create summaries or concept maps to organize their understanding. Students write up two fictional or real case histories, documenting all sections of history-taking, examination findings, differential diagnosis,

and treatment planning. Faculty provide feedback, and students can use this for later presentations.

2. Peer Learning (30 minutes):

- In pairs or small groups, students take turns presenting cases to each other, simulating a full case presentation with differential diagnosis and treatment plan. Peers then provide structured feedback, focusing on presentation clarity, clinical reasoning, and thoroughness of the differential diagnosis.
- Students are assigned specific topics related to pleural diseases (e.g., pleural effusion, pneumothorax, pleuritis) to research and then teach to peers in an interactive format, such as a mini-presentation or Q&A session. This reinforces knowledge and builds confidence.
- In groups, students take turns playing the roles of patient, doctor, and observer. The "doctor" conducts history-taking and an examination on a peer acting as a patient, while the observer provides feedback on both clinical skills and bedside manner.

3. Flipped Classroom (30 minutes):

- Prior to class, students watch pre-recorded lectures covering core concepts of pleural disease, such as pathophysiology, examination techniques, and management approaches. They also review prepared case scenarios and come to class ready to discuss them in depth.
- In class, students work in small groups to analyze and present the cases they prepared beforehand, focusing on their diagnostic reasoning and treatment plan. Faculty guide discussions, emphasizing key learning points and providing feedback on each group's approach.

		<ul style="list-style-type: none"> Students participate in mock rounds where each group presents their case to the entire class, simulating real clinical rounds. Faculty provide feedback on differential diagnoses, examination findings, and treatment plans, fostering an environment for collaborative learning. To reinforce learning, students complete in-class quizzes based on the pre-class material, followed by group problem-solving exercises where they apply their knowledge to case-based questions and scenarios. Faculty provide guidance to clarify concepts as needed. <p>(Total Duration: 120 mins)</p>
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Topic 23 Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases (LH : 4, NLHT: 2, NLHP: 4 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Describe types, causes, clinical features along with principles of Management and management of Ḍu'f Qalb	CC	MK	KH	L, L&PPT	QZ, S-LAQ, T-CS	F&S	2	-	LH
CO1	Explain the concept of Palpitation as per Unani literature along with its causes, clinical features, principles of management and management	CC	MK	KH	L, L&PPT	T-CS, S-LAQ, QZ	F&S	2	-	LH
CO3	Discuss clinical assessment, investigations, diagnostic approach and complications of Palpitation	CAN	MK	KH	RP, CBL, SIM	CBA, SBA	F&S	2	-	NLHT23.1
CO3	Demonstrate the ability to perform examination of Nabz in patients presenting with palpitations, assessing the characteristics of pulse and correlating the findings with the potential underlying conditions.	PSY-GUD	NK	SH	D	CBA	F&S	2	-	NLHP23.1
CO1	Define Ghashi and explain its causes, clinical features, principles of management and management. Differentiate between Ghashi & Subat.	CK	MK	K	L&PPT, L, L_VC	VV-Viva, S-LAQ, T-CS, QZ	F&S	2	-	LH

CO1	Define cardiac failure and describe its classification and pathophysiology.	CC	MK	KH	L_VC, L, L&PPT	T-CS, CL-PR	F&S	2	-	LH
CO3	Describe the clinical features of cardiac failure, such as dyspnea, fatigue, edema, and exercise intolerance, and discuss the significance of these symptoms in patient assessment.	CC	MK	KH	PL, SIM, CBL	SBA, CBA, SP	F&S	2	-	NLHT23.2
CO3	Demonstrate the ability to perform examination of patients of Heart failure, suggest and interpret relevant laboratory tests and imaging studies (such as echocardiography), to diagnose cardiac failure, while emphasizing the critical role of accurate diagnosis in guiding effective treatment	PSY-GUD	MK	SH	CBL, SIM, D	OSCE, DOPS, DOPS	F&S	2	-	NLHP23.2

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT23.1	Diagnostic approach to Khafaqān (Palpitation)	<p>1. Case-Based Learning (30 minutes):</p> <ul style="list-style-type: none"> Present students with real or simulated cases of patients experiencing palpitations. Divide students into small groups to discuss the clinical assessment, potential investigations, and diagnostic approaches for each case. Each group presents their findings to the class, fostering discussion. <p>2. Role-Playing Scenarios(30 minutes):</p> <ul style="list-style-type: none"> Students role-play as clinicians and patients. One student presents with palpitations, while the other conducts a clinical assessment. Emphasize effective communication, history-taking, and physical examination techniques.

		(Total Duration: 60 mins)
NLHT23.2	Overview of Suqūṭ Qalb (Heart Failure)	<p>1. Case-Based Learning (30 minutes)</p> <ul style="list-style-type: none"> • Present students with clinical cases of patients with cardiac failure, highlighting different symptoms. • In small groups, students identify the clinical features and discuss their implications in patient assessment. <p>2. Simulation (30 minutes)</p> <ul style="list-style-type: none"> • Use simulation tools or standardized patients to create scenarios where students must assess and manage patients exhibiting symptoms of cardiac failure • Encourage students to formulate management plans based on their assessment findings. <p>(Total Duration: 60 mins)</p> <p>3. Peer Learning (optional)</p> <ul style="list-style-type: none"> • Students prepare short presentations on specific symptoms of cardiac failure (dyspnea, fatigue, edema, exercise intolerance) and their significance. • Present to their peers in small groups to facilitate knowledge sharing.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP23.1	Examination of Nabz in patients presenting with Khafaqān (Palpitation)	1. Demonstration (120 minutes)

		<ul style="list-style-type: none"> • Faculty will demonstrate the Nabz examination technique specifically for patients experiencing palpitations. • The instructor will explain the purpose of the Nabz examination in assessing cardiac health, particularly in relation to palpitations. • The instructor will showcase proper positioning of the patient and the examiner, demonstrating how to palpate the pulse at different sites (radial, carotid) and noting the characteristics of the pulse (Adila e Nabz). • Discussion on correlating specific pulse characteristics with underlying conditions such as arrhythmias, anxiety, or other cardiac issues. • Students will practice the Nabz examination in pairs, under faculty supervision. • Faculty will circulate among the groups, providing real-time feedback on technique, communication, and observational skills. • After completing the examination, students will discuss their findings with each other, focusing on how the characteristics of the pulse could relate to the symptoms experienced.
NLHP23.2	Diagnostic approach to Suqūṭ Qalb (Heart Failure)	<p>1. Case-Based Learning (40 minutes)</p> <ul style="list-style-type: none"> • Present real-world case studies of patients with cardiac failure. Students work in small groups to discuss the clinical features, diagnostic approaches, and treatment plans based on provided patient information. • Faculty facilitate discussions, guiding students to connect theoretical knowledge with practical applications <p>2. Simulation-Based Learning (40 minutes)</p>

		<ul style="list-style-type: none"> Utilize simulation mannequins or standardized patients to practice performing physical examinations for signs of cardiac failure. Students rotate roles to practice both examination and diagnosis. Faculty members guide students on proper examination techniques and interpretation of findings during simulations. <p>3. Demonstration and Hands-On Practice(40 minutes)</p> <ul style="list-style-type: none"> Faculty demonstrate the use of echocardiography equipment and other imaging modalities, explaining key indicators of cardiac failure. Students then practice using the equipment under faculty supervision, interpreting imaging studies. <p>(Total Duration: 120 mins)</p>
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Topic 24 Cardiovascular System Part 2: افلاس قلب Iflās-i-Qalb (Ischaemic Heart Disease) (LH : 2, NLHT: 3, NLHP: 3 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define angina pectoris, explain its pathophysiology and types to provide a foundational understanding of the condition.	CC	MK	KH	L&PPT	PRN, QZ , T-CS	F&S	2	-	LH
CO1	Describe the clinical presentation and key symptoms of angina pectoris, including the characteristics of chest pain and the triggers that may provoke the episodes.	CC	MK	KH	SIM, CBL, RP, EDU	CL-PR, CBA	F&S	2	-	NLHT24.1
CO3	Outline the diagnostic approach to angina pectoris, including the role of history taking, physical examination, and diagnostic tests such as ECG, stress testing and coronary angiography to assess the severity and underlying causes.	CC	MK	KH	RP, SIM, DIS, CBL	CL-PR, SP	F&S	2	-	NLHT24.2

CO1	Define myocardial infarction, describe its risk factors, pathophysiology, types: (ST-Elevation Myocardial Infarction [STEMI] and Non-ST Elevation Myocardial Infarction [NSTEMI]) to establish a foundational understanding of the condition.	CC	MK	KH	L&PPT	QZ , CL-PR, T-CS	F&S	2	-	LH
CO1, CO5	Identify the role of Unani medicine in the rehabilitation of post-MI survivors, emphasizing the holistic approach, dietary modifications, lifestyle changes, and integrative treatment approaches.	CAN	DK	KH	L	CL-PR, COM	F&S	2	-	LH
CO3	Interpret and analyze the levels of cardiac biomarkers to determine the presence and severity of acute myocardial infarction	CAN	MK	KH	W, CBL, SIM, DIS	SP, CL-PR	F&S	2	V-MA	NLHT24.3
CO3	Demonstrate the ability to interpret and explain the following investigations: 2D echocardiography, exercise testing, and coronary angiogram, and discuss their role in the diagnosis of Ischemic Heart Disease (IHD)	PSY-GUD	NK	SH	CBL, W, DIS, SIM	CL-PR, SP	F&S	2	-	NLHP24.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT24.1	Clinical presentation of Waja' al-Qalb (Angina Pectoris)	<p>1. Case-Based Learning (30 minutes):</p> <ul style="list-style-type: none"> Students are divided into small groups and presented with a series of case scenarios involving patients with angina pectoris. Each group discusses the case, focusing on the clinical presentation, the nature of the chest pain, associated symptoms, and potential triggers. Groups then present their findings to the class, encouraging discussion and questions.

		<p>2. Role-Play (30 minutes):</p> <ul style="list-style-type: none">• In pairs, one student acts as the patient experiencing angina symptoms while the other plays the role of the clinician.• The "patient" describes their symptoms, including the nature of chest pain and any associated features or triggers.• After the role-play, pairs switch roles to reinforce learning.• This will develop communication skills and enhance the understanding of patient experiences related to angina pectoris. <p>(Total Duration: 60 mins)</p> <p>3. Simulation (Optional):</p> <ul style="list-style-type: none">• Use high-fidelity mannequins or standardized patients to simulate a clinical scenario involving an angina attack.• Students must assess the simulated patient, identify symptoms, and determine appropriate responses.• After the simulation, a debriefing session occurs where students reflect on their experiences and discuss their assessments. <p>4. Edutainment (Optional):</p> <ul style="list-style-type: none">• Symptom Charades• In teams, students play a charades-style game where they act out specific symptoms of angina pectoris, while their peers guess. This helps students remember key symptoms in a fun, memorable way.• Trigger Matching Game
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		<ul style="list-style-type: none"> • A quick card-matching game where students pair common angina triggers (e.g., stress, physical exertion) with symptoms to reinforce understanding of what provokes episodes.
NLHT24.2	Diagnostic approach to Waja' al-Qalb (Angina Pectoris)	<p>1. Case-Based Learning (20 minutes)</p> <ul style="list-style-type: none"> • Divide students into small groups and present a clinical vignette of a patient with suspected angina pectoris. • Each group discusses the patient's history, physical exam findings, and proposes a diagnostic approach, including necessary tests. <p>2. Simulation-Based Learning (20 minutes)</p> <ul style="list-style-type: none"> • Use simulation mannequins or standardized patients to practice taking a history and conducting a physical examination. • Students simulate interactions with a patient presenting with angina symptoms, practicing history taking and physical examination skills. <p>3. Small Group Discussions (20 minutes)</p> <ul style="list-style-type: none"> • Organize discussions around recent guidelines or literature on the diagnosis of angina pectoris. • Groups review the importance of diagnostic tests and share insights on managing patients with angina. <p>(Total Duration: 60 mins)</p> <p>4. Role-Playing Activities (optional)</p> <p>Activity:</p>

		<ul style="list-style-type: none"> • Students role-play as healthcare providers and patients to practice the communication of diagnostic findings and patient education. • One student acts as the clinician explaining diagnostic approaches, while another acts as a patient asking questions and expressing concerns.
NLHT24.3	<p>Interpretation of the levels of cardiac biomarkers in <u>Hād Maytūta al-Qalb</u> (Acute Myocardial Infarction)</p>	<p>1. Case-Based Learning (20 minutes)</p> <ul style="list-style-type: none"> • Present a clinical case of a patient with suspected acute myocardial infarction, including their symptoms and initial lab results. • Students analyze the cardiac biomarker results (e.g., troponin, CK-MB) and discuss their significance in diagnosing acute myocardial infarction. <p>2. Simulation-Based Learning (20 minutes)</p> <ul style="list-style-type: none"> • Use simulation software or patient scenarios to practice interpreting cardiac biomarker reports. • Students receive simulated lab results and must identify abnormalities and make clinical decisions based on those findings. <p>3. Discussions (20 minutes)</p> <ul style="list-style-type: none"> • Organize discussions focused on the role of cardiac biomarkers in the diagnosis and management of acute myocardial infarction. • Each group reviews different cardiac biomarkers and their clinical significance, then shares insights with the class. <p>(Total Duration: 60 mins)</p>

		<p>4. Interactive Workshops (optional)</p> <ul style="list-style-type: none"> • Conduct a workshop on interpreting laboratory results, specifically cardiac markers. • Students work with actual or simulated lab reports, practicing interpretation and discussing implications for patient care.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP24.1	Diagnostic work up of patient having Iflās-i-Qalb (Ischaemic Heart Disease)	<p>1. Case-Based Learning (40 minutes)</p> <ul style="list-style-type: none"> • Present a clinical case of a patient with suspected Ischemic Heart Disease (IHD) requiring the discussed investigations. • Students interpret provided investigation reports (2D echocardiography, exercise testing results, and coronary angiogram findings) and explain their significance in diagnosing IHD. <p>2. Simulation (40 minutes)</p> <ul style="list-style-type: none"> • Use echocardiography simulators or real equipment to practice identifying key features on a 2D echocardiogram and understanding the exercise testing procedure. • Students interact with the simulator to view different cardiac conditions and practice explaining findings relevant to IHD. <p>3. Discussions (40 minutes)</p> <ul style="list-style-type: none"> • Facilitate discussions around the importance and application of each investigation in diagnosing IHD.

		<ul style="list-style-type: none"> Groups discuss case studies focusing on how different tests contribute to diagnosis and management decisions. <p>(Total Duration: 120 mins)</p> <p>4. Interactive Workshops (optional)</p> <ul style="list-style-type: none"> Conduct a workshop that allows students to analyze and discuss multiple cases involving different diagnostic tests for IHD. Students rotate through stations with different scenarios, interpreting echocardiograms, exercise tests, and angiograms.
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Topic 25 Cardiovascular System Part 3: أمراض عضلة القلب: Amrād-i-'Aḍala al-Qalb (Diseases of Myocardium) (LH : 3, NLHT: 3, NLHP: 3 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Describe causes, clinical features, differential diagnosis, investigations, diagnosis, prognosis and management of Myocarditis based on Unani principles and recent scientific advances.	CC	DK	KH	CBL, W, DIS	CL-PR, CR-RED, PA	F&S	2	-	NLHT25.1
CO3	Outline the fundamental concepts of cardiomyopathies, including the definitions, classification (dilated, hypertrophic, restrictive, and arrhythmogenic), and basic pathophysiology to establish a foundational understanding for further studies	CAP	MK	KH	L, L&PPT, L&GD	T-CS, T-OBT, QZ	F&S	2	-	LH
CO3	Demonstrate ability to develop a comprehensive understanding of treatment plan for cardiomyopathies as per unani medicine (including dietary modifications and lifestyle changes) and recent scientific advances.	CAN	DK	KH	CBL, DIS, SIM	CBA, COM, T-CS	F&S	2	-	NLHT25.2

CO3	Demonstrate the ability to conduct a comprehensive case presentation of a patient with myocarditis, including the history, clinical findings, differential diagnosis, and management plan while effectively engaging with peers and faculty.	PSY-SET	MK	SH	RP, SIM	PA, CHK, RS	F&S	2	-	NLHP25.1
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT25.1	Overview of Itihābe Aḍal al-Qalb (Myocarditis)	<p>1. Case-Based Learning (60 minutes)</p> <ul style="list-style-type: none"> Present a clinical case of myocarditis with varying symptoms and comorbidities. Students work in small groups to identify differential diagnoses, discuss appropriate investigations, and formulate a management plan based on Unani principles and recent scientific advances. <p>2. Discussions (60 minutes)</p> <ul style="list-style-type: none"> Facilitate a discussion on the differential diagnosis and management strategies for myocarditis. Assign each group a specific aspect (e.g., differential diagnosis, Unani management principles, or scientific advancements) to explore, followed by a presentation to the class. <p>(Total Duration: 60 mins)</p> <p>3. Interactive Workshops (Optional)</p> <ul style="list-style-type: none"> Conduct workshops that combine Unani principles with modern scientific approaches in the management of myocarditis.

		<ul style="list-style-type: none"> Discuss and demonstrate treatments used in Unani medicine, such as herbal remedies or dietary changes, alongside conventional management strategies.
NLHT25.2	Treatment plan for Amrāḍ Aḍalat al-Qalb (Cardiomyopathies)	<p>1. Case-Based Learning (30 minutes)</p> <p>Students will be divided into small groups and presented with clinical case scenarios of patients with different types of cardiomyopathies. Each group will discuss and devise a treatment plan integrating both modern and Unani approaches, including specific dietary and lifestyle changes.</p> <p>2. Group Discussions (30 minutes)</p> <p>Facilitate a discussion on the efficacy and application of dietary modifications and lifestyle changes in the management of cardiomyopathies. Students will share their findings from CBL and discuss alternative treatment options.</p> <p>(Total Duration: 60 mins)</p> <p>3. Simulation Activities (optional)</p> <p>Use simulation technology to create scenarios where students must assess a patient's condition and recommend a holistic treatment plan. This could include role-playing as healthcare providers advising patients on dietary and lifestyle changes.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP25.1	Case presentation of Illihābe Aḍal al-Qalb (Myocarditis)	<p>1. Simulated Patient Interviews(90 minutes):</p> <p>Using a simulated patient or standardized patient (actor), students gather the</p>

		<p>patient's history and practice articulating clinical findings. This prepares them for real-life case presentations with a focus on patient interaction.</p> <p>2.Role-Playing with Faculty Feedback(90 minutes): Students role-play case presentations with one acting as the presenter, others as medical team members asking questions, and faculty giving feedback. This encourages interaction, enhances clinical insight, and prepares students for real-world settings.</p> <p>(Total Duration: 180 mins)</p>
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Topic 26 Cardiovascular System Part 4: امراض صمامات قلب Amrād-i-Ṣamāmāt-i-Qalb (Diseases of Heart Valves) (LH : 4, NLHT: 3, NLHP: 10 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Define endocarditis and give its classification. Discuss infective endocarditis including its epidemiology, pathophysiology, causative organisms and clinical features.	CK	MK	K	L, L&PPT	S-LAQ, QZ , T-CS	F&S	2	-	LH
CO1	Demonstrate ability to develop a comprehensive understanding of treatment plan for endocarditis as per unani medicine and recent medical advances.	CC	MK	KH	CBL, DIS, W	PA, PRN	F&S	2	-	NLHT26.1
CO3	Perform and demonstrate physical examination of patients/simulated patients with infective endocarditis.	PSY-GUD	MK	SH	PL, D	PA, SP	F&S	2	-	NLHP26.1
CO1, CO3	Describe the etiology, pathogenesis and clinical features of RHD while discussing the essential criteria, differential diagnosis, investigations and valve involvement.	CK	MK	K	L&PPT , L	QZ , M-POS, T-CS, PUZ	F&S	2	-	LH
CO3	Explain Jones criteria and investigations for the diagnosis of Acute Rheumatic Fever associated with R.H.D	CC	MK	KH	CBL, DIS, L_VC	PRN, PA	F&S	2	-	NLHT26.2

CO1	Demonstrate the ability to develop a comprehensive understanding of treatment plan for Rheumatic Heart Disease (RHD) using principles of management from both modern and Unani medicine.	PSY-GUD	DK	SH	CBL, DIS, W	PRN, PA, COM	F&S	2	-	NLHP26.2
CO3	Perform and demonstrate physical examination of patients/simulated patients with Rheumatic Heart Disease (RHD).	PSY-GUD	MK	SH	D, SIM	CBA, PA, SP	F&S	2	-	NLHP26.3
CO1	Discuss Amraze-e Samamaate Qalb with a focus on its causes, clinical features and management as per classical Unani literature.	CK	MK	K	L&PPT , L	COM, PUZ, QZ	F&S	2	-	LH
CO1, CO3	Describe classification, causes, pathogenesis, clinical features and Investigations of valvular heart diseases emphasising hemodynamic changes	CC	MK	KH	L&PPT , L, L_VC	PRN, T-CS	F&S	2	-	LH
CO3	Demonstrate the ability to understand and explain the videographic representation of valvuloplasty, valvotomy, coronary revascularization, and cardiac transplantation.	PSY-MEC	NK	SH	DIS, L_VC	CL-PR, PA, VV-Viva	F&S	2	-	NLHP26.4

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT26.1	Treatment plan for Baṭan al-Qalb (endocarditis)	<p>1. Case-Based Learning (60 minutes):</p> <ul style="list-style-type: none"> Present a clinical case of a patient with endocarditis. Students work in groups to develop an integrative treatment plan that incorporates Unani and modern medicine approaches, including dietary and lifestyle recommendations

		<p>2. Discussions (60 minutes):</p> <ul style="list-style-type: none"> • Facilitate a discussion on the roles of modern and Unani medicine in the management of endocarditis. • Assign each group a specific aspect of treatment (e.g., dietary changes, lifestyle modifications, pharmacological approaches) to explore and present to the class. <p>(Total Duration: 120 mins)</p> <p>3. Interactive Workshop (Optional)</p> <ul style="list-style-type: none"> • Conduct workshops focusing on dietary modifications and lifestyle changes for managing endocarditis. • Demonstrate specific dietary plans and lifestyle interventions, including exercises, stress management techniques, and herbal remedies from Unani medicine.
NLHT26.2	<p>Overview of Dā' al-Qalb Hudāri (Rheumatic Heart disease)</p>	<p>1. Interactive Lecture (20 minutes):</p> <ul style="list-style-type: none"> • Faculty delivers a lecture on the Jones criteria and the role of various investigations in diagnosing ARF. • The lecture includes slides detailing the major and minor criteria of the Jones criteria, diagnostic investigations (such as throat swabs, echocardiography, and serological tests), and their clinical significance. <p>2. Case-Based Learning (20 minutes):</p> <ul style="list-style-type: none"> • Students work in small groups on a clinical vignette of a patient presenting with symptoms suggestive of ARF.

		<ul style="list-style-type: none"> • Groups analyze the case, identifying relevant symptoms, applying the Jones criteria to make a diagnosis, and proposing necessary investigations. Each group presents their findings. <p>3. Discussion (20 minutes):</p> <ul style="list-style-type: none"> • Organize a structured discussion session where students can share their insights on the importance of each component of the Jones criteria and the investigations. • The discussion includes reviewing recent guidelines, addressing common misconceptions, and discussing variations in clinical presentations. <p>(Total Duration: 60 mins)</p>
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Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP26.1	clinical presentation of Iltihābe Baṭān al-Qalb (Infective Endocarditis)	<p>1. Demonstration (60 minutes)</p> <p>Activity:</p> <ul style="list-style-type: none"> • Faculty demonstrates the physical examination techniques relevant to infective endocarditis. • This includes assessing vital signs, performing a thorough cardiovascular examination (e.g., auscultation for murmurs), and checking for vascular manifestations (e.g., Janeway lesions, Osler nodes). • Students demonstrate the ability to perform cardiovascular examinations on simulated patients or real patients under supervision.

		<ul style="list-style-type: none"> • Each student will complete a checklist documenting the findings of their examinations, focusing on signs relevant to infective endocarditis. <p>2. Peer Teaching (120 minutes)</p> <p>Activity:</p> <ul style="list-style-type: none"> • Students work in pairs to teach each other the key components cardiovascular examinations for infective endocarditis. • Each student presents findings from their clinical practice, sharing their documented results and discussing variations in presentations. <p>(Total duration: 180 minutes)</p>
NLHP26.2	Treatment plan for Dā' al-Qalb Hudāri (Rheumatic Heart disease)	<p>1. Case-Based Learning (120 minutes)</p> <ul style="list-style-type: none"> • Students analyze case studies of patients with RHD, focusing on their medical history, current symptoms, and treatment options. • In small groups, students identify components of integrative treatment plan, including pharmacological interventions, lifestyle modifications, and complementary therapies from Unani medicine. <p>2. Discussions (60 minutes)</p> <ul style="list-style-type: none"> • Organize a group discussion where students explore various treatment modalities for RHD. • Students discuss the efficacy and appropriateness of different treatment options from both modern and Unani perspectives, considering factors like dietary recommendations and physical activity.

		<p align="center">(Total Duration: 180 mins)</p> <p>3. Workshops (optional)</p> <ul style="list-style-type: none"> • Conduct workshops focusing on dietary modifications and lifestyle changes for RHD patients. • Invite an expert in Unani medicine to share insights on holistic approaches, including medicines, dietary practices, and stress management techniques.
NLHP26.3	<p>Clinical presentation of Dā' al-Qalb Hudāri (Rheumatic Heart disease)</p>	<p>1. Demonstration (60 minutes)</p> <ul style="list-style-type: none"> • Faculty demonstrates the steps for conducting a physical examination focused on patients with RHD. • The instructor will perform a live demonstration, explaining the significance of each step, including the assessment of vital signs, auscultation of heart sounds, palpation of pulses, and inspection for signs of heart failure. • Students practice conducting vascular and cardiac examinations on each other or simulated patients. • In pairs, students take turns performing the examinations, focusing on identifying abnormal findings relevant to RHD, such as murmurs, edema, or other signs. <p>2. Simulation (60 minutes)</p> <ul style="list-style-type: none"> • Engage in a simulation scenario where students assess a simulated patient presenting with RHD.

						<ul style="list-style-type: none"> Students will interact with a high-fidelity mannequin or role-play actor to perform a full physical examination, documenting their findings in a structured format. <p>(Total Duration: 120 mins)</p>					
NLHP26.4	Videographic representation of valvuloplasty, valvotomy, coronary revascularization, and cardiac transplantation.					<p>1. Lecture with Video Analysis (60 minutes)</p> <ul style="list-style-type: none"> Deliver a lecture and show video clips to analyze videographic representations of valvuloplasty, valvotomy, coronary revascularization, and cardiac transplantation. Students will view pre-recorded surgical procedures, focusing on the techniques used and the anatomical structures involved. They will take notes on key steps and important considerations during each procedure. <p>2. Group Discussion (60 minutes)</p> <ul style="list-style-type: none"> Engage in a guided discussion following the video analysis. Students will discuss the key points observed in the videos, asking questions and clarifying concepts related to the surgical procedures. Faculty will facilitate the discussion, emphasizing the implications of each technique in clinical practice. <p>(Total Duration: 120 mins)</p>					
Topic 27 Cardiovascular System Part 5: امراض رقتارقلب غير منظم Amrād-i-Raftar-i-Qalb Ghayr Munaẓim (Cardiac Arrhythmias) (LH : 4, NLHT: 2, NLHP: 7 hours)											
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3	
CO1	Define and classify tachycardia, differentiating between types such as sinus, supraventricular, and ventricular	CK	MK	K	L&PPT , L	PUZ, QZ , T-CS	F&S	2	-	LH	

	tachycardia based on their origins and characteristics while discussing classical concept of Tachycardia									
CO1	Define bradycardia and describe its types, including sinus bradycardia and atrioventricular (AV) block, while discussing its concept in Unani Medicine.	CK	DK	K	L&GD, L&PPT, L	T-CS, CL-PR, QZ	F&S	2	-	LH
CO1	Recognize the clinical features of tachycardia, including symptoms like palpitations, shortness of breath, dizziness, and the potential risks associated with each type	CK	DK	KH	FC, SDL, PL	Log book, PA, VV-Viva	F&S	2	-	NLHT27.1
CO3	Identify the clinical features associated with bradycardia and the potential complications that may arise.	CC	DK	KH	SDL, PL, FC	PA, CL-PR, VV-Viva, Log book, SA	F&S	2	-	NLHT27.2
CO3	Demonstrate the ability to diagnose tachycardia, focusing on the interpretation of ECG findings and the importance of identifying underlying causes.	PSY-GUD	MK	SH	LRI	CHK, P-EXAM, P-PRF	F&S	2	-	NLHP27.1
CO3	Demonstrate the ability to diagnose bradycardia, focusing on the interpretation of ECG findings and the assessment of underlying causes and contributing factors.	PSY-GUD	MK	SH	LRI	CHK, P-EXAM, P-PRF	F&S	2	-	NLHP27.2
CO1	Define heart block and enumerate its clinical features. Differentiate between the types of heart block	CK	DK	K	L, L&PPT	T-CS, CL-PR, QZ, P-POS, PUZ	F&S	2	-	LH
CO3	Demonstrate the ability to diagnose heart block, with an emphasis on interpreting electrocardiogram (ECG) findings and recognise the indications for further investigations	PSY-GUD	DK	SH	LRI	P-PRF, P-EXAM, CHK	F&S	2	-	NLHP27.3
Non Lecture Hour Theory										
S.No	Name				Description of Theory Activity					

NLHT27.1	Clinical features of Sur'a al-Qalb (Tachycardia)	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation (Duration: 1-2 hours)</p> <ul style="list-style-type: none"> • Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case frameworkClinical features and complications of tachycardia) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> • Instructor clarifies key concepts and addresses questions arising from the pre-class materials. • Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> ○ Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. ○ Groups present their findings and discuss different approaches to solving problems. • Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (optional):</p> <p>Students independently explore clinical features of tachycardia which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (optional):</p>
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		Collaborative group work where students can discuss and teach each other clinical features of tachycardia and the potential risks associated with each type
NLHT27.2	Clinical features and complications of Buṭū' al-Qalb (Bradycardia)	<p>1. Flipped Classroom:</p> <p>Phase 1: Pre-Class Preparation (Duration: 1-2 hours)</p> <ul style="list-style-type: none"> • Students watch pre-recorded lectures or review reading materials provided by the instructor. Materials should cover the foundational knowledge required for the classroom discussion (e.g., background on the topic, case frameworkClinical features and complications of bradycardia) <p>Phase 2: In-Class Discussion (Flipped Session) (Duration :60 mins)</p> <ul style="list-style-type: none"> • Instructor clarifies key concepts and addresses questions arising from the pre-class materials. • Divide students into small groups for case-based problem-solving: <ul style="list-style-type: none"> ○ Analyze 2-3 patient cases, focusing on diagnosis, management, and challenges. ○ Groups present their findings and discuss different approaches to solving problems. • Instructor moderates a reflective discussion to highlight key takeaways and reinforce learning. <p>(Total Duration: 60 mins for in-Class Session)</p> <p>2. Self-Directed Learning (optional):</p>

		<p>Students independently explore clinical features and complications of bradycardia which can be reinforced through follow-up discussions or assessments.</p> <p>3. Peer Learning (optional):</p> <p>Collaborative group work where students can discuss and teach each other clinical features and complications of bradycardia and the potential risks associated with each type</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP27.1	Diagnosis of Sur'a al-Qalb (Tachycardia)	<p>Lab Report interpretation (120 minutes)</p> <ul style="list-style-type: none"> • Provide students with real or simulated lab reports and ECG. Students analyze the reports in groups, correlating findings with clinical symptoms and discussing potential differential diagnoses. • Assign small groups to prepare presentations on Diagnosis of tachycardia, including typical investigations and their clinical implications. Groups can then share their findings with the class. • After students interpret reports, have them exchange their interpretations with peers for feedback. This encourages collaborative learning and critical thinking. • Use quizzes with lab reports and clinical scenarios where students must match assay results to potential diagnoses, reinforcing their understanding through active engagement
NLHP27.2	Diagnostic evaluation of Buṭū' al-Qalb (Bradycardia)	Lab Report interpretation (180 minutes)

		<ul style="list-style-type: none"> • Provide students with real or simulated lab reports and ECG. Students analyze the reports in groups, correlating findings with clinical symptoms and discussing potential differential diagnoses. • Assign small groups to prepare presentations on Diagnosis of bradycardia, including typical investigations and their clinical implications. Groups can then share their findings with the class. • After students interpret reports, have them exchange their interpretations with peers for feedback. This encourages collaborative learning and critical thinking. <p>Use quizzes with lab reports and clinical scenarios where students must match assay results to potential diagnoses, reinforcing their understanding through active engagement</p>
NLHP27.3	Diagnostic approach to Manuate Qalb(Heart Block)	<p>Lab Report interpretation (180 min)</p> <ul style="list-style-type: none"> • Provide students with real or simulated lab reports and ECG. Students analyze the reports in groups, correlating findings with clinical symptoms and discussing potential differential diagnoses. • Assign small groups to prepare presentations on diagnostic approach to heart block, including typical investigations and their clinical implications. Groups can then share their findings with the class. • After students interpret reports, have them exchange their interpretations with peers for feedback. This encourages collaborative learning and critical thinking. • Use quizzes with lab reports and clinical scenarios where students must match assay results to potential diagnoses, reinforcing their understanding through active engagement
<p>Topic 28 Cardiovascular System Part 6: امراض غشاء القلب Amrād-i-Ghishā'-i-Qalb (Diseases of Pericardium) (LH : 3, NLHT: 1, NLHP: 2 hours)</p>		

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Describe classification, Etiopathogenesis, clinical features and complications of pericarditis and Discuss the differential diagnosis, investigations, diagnosis and prognosis of different types of Pericarditis.	CK	MK	K	L&PPT , L, L&GD	QZ , S-LAQ	F&S	2	-	LH
CO1	Demonstrate the ability to develop a comprehensive understanding of treatment plan for pericarditis using principles of management from both modern and Unani medicine including dietary modifications and refrains.	CS	MK	KH	L&PPT , L&GD	S-LAQ, T-CS, VV-Viva	F&S	2	-	LH
CO3	Describe causes, clinical features, investigations and management of Pericardial effusion in Unani as well as in contemporary medicine	CC	DK	K	PL, L&PPT , SDL	CL-PR, S-LAQ, VV-Viva, PA, QZ	F&S	2	-	NLHT28.1
CO3	Demonstrate the ability to conduct a comprehensive case presentation, including detailed history-taking and physical examination of patients or simulated patients with pericardial diseases, formulating differential diagnoses and treatment plans	PSY-MEC	MK	SH	CD, SIM	PRN, SP	F&S	2	-	NLHP28.1

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT28.1	Concept and management of Istisqā –ul-Qalb (Pericardial Effusion)	<p>1. Self-Directed Learning (30 minutes):</p> <ul style="list-style-type: none"> Students will conduct independent research using textbooks, online resources, and recent journal articles related to pericardial effusion.

		<ul style="list-style-type: none"> Ask students to compile a summary of key points, including history, physical examination techniques, differential diagnoses, and treatment options. <p>2. Peer Learning (30 minutes):</p> <ul style="list-style-type: none"> In pairs or small groups, students take turns presenting each other about Pericardial effusion. Peers then provide structured feedback, focusing on presentation clarity, clinical reasoning, and thoroughness of the disease. <p>(Total Duration: 60 mins)</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP28.1	Case Study of Itihābe Ghilāf –ul-Qalb (Pericarditis)	<p>1. Case Presentation (60 minutes)</p> <ul style="list-style-type: none"> Students are divided into small groups and assigned specific pericardial diseases (e.g., pericarditis, pericardial effusion). Each group researches the assigned condition, focusing on symptoms, history, examination techniques, differential diagnoses, and treatment plans. Groups prepare a case presentation template that includes sections for history, examination findings, differential diagnoses, and treatment options. Each group presents their case findings to the class, highlighting key history, examination findings, differential diagnoses, and proposed treatment plans.

		<ul style="list-style-type: none"> The class engages in a Q&A session, allowing students to defend their diagnosis and treatment plans. <p>2. Simulated Patient Interactions (60 minutes)</p> <ul style="list-style-type: none"> Faculty arranges for simulated patients or uses standardized patients portraying pericardial disease symptoms. In pairs, one student acts as the clinician and the other as the patient, practicing detailed history-taking and physical examination. After the simulation, peers and faculty provide feedback on the accuracy and thoroughness of the examination and history-taking. <p>(Total Duration: 120 mins)</p>
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Topic 29 امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) (LH : 7, NLHT: 3, NLHP: 4 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Define hypertension and describe its types, risk factors, pathogenesis and causes.	CC	MK	K	L&PPT	CL-PR, T-CS, S-LAQ	F&S	3	-	LH
CO3	Summarize the diagnostic evaluation for hypertension, including the role of laboratory tests, imaging studies, and the identification of secondary causes of hypertension.	CAN	MK	KH	DIS, L, LS	T-CS, S-LAQ, CL-PR	F&S	3	-	LH
CO1	Analyze the potential complications of untreated hypertension and their impact on patient prognosis and quality of life.	CAN	MK	KH	L&PPT, DIS	Log book, T-CS, PRN	F&S	3	-	LH
CO3	Discuss and develop comprehensive understanding of management strategies for Hypertension, emphasizing individualized patient care, including lifestyle modifications, pharmacological treatments, and dietary adjustments,	CC	MK	K	CBL	CL-PR, T-CS, COM, QZ	F&S	3	-	NLHT29.1

	while integrating holistic treatment approaches of Unani medicine and recent contemporary knowledge.									
CO3, CO6	Demonstrate the ability to conduct a comprehensive clinical assessment of a patient with hypertension by accurately performing and interpreting blood pressure measurement techniques, applying effective history-taking methods, identifying key physical examination findings, and recognizing relevant clinical features associated with hypertension.	PSY-COR	MK	K	SIM, CBL, RP	DOPS, DOPS, OSCE, P- VIVA, Mini- CEX	F&S	3	-	NLHP29.1
CO2, CO5	Demonstrate the ability to counsel patients with hypertension on lifestyle modification, effectively explaining the importance of lifestyle changes, addressing patient concerns, and fostering patient commitment to adherence to healthy lifestyle, including diet, exercise, stress management, and sleep hygiene.	AFT-VAL	MK	SH	RP, CBL	PA, SP	F&S	3	-	NLHP29.2
CO3	Describe causes, clinical symptoms, differential diagnosis, investigations, diagnostic methods and prognosis of Cor Pulmonale.	CC	DK	KH	L&PPT	VV-Viva, T- CS	F&S	3	-	LH
CO1	Develop a comprehensive understanding of treatment plan for Cor Pumonale integrating holistic treatment approaches of Unani medicine and recent contemporary knowledge.	CS	DK	KH	CBL, PBL, SDL	VV-Viva, T- CS	F&S	3	-	NLHT29.2
CO1	Describe the causes and clinical features of Circulatory failure (cardiogenic shock).	CS	DK	KH	L&GD, L&PPT	T-CS, VV- Viva	F&S	3	-	LH
CO3	Discuss the Differential Diagnosis, Prognosis and diagnosis of Circulatory Failure.	CS	DK	KH	L&GD, L&PPT	VV-Viva, T- CS	F&S	3	-	LH
Non Lecture Hour Theory										

S.No	Name	Description of Theory Activity
NLHT29.1	Management strategies for Ḍagħṭ al-Dam Qawī (Hypertension)	<p>1. Case-Based Learning (120 mins):</p> <ul style="list-style-type: none"> • Present students with patient cases involving hypertension, each with unique factors such as age, comorbidities, lifestyle, and dietary habits. Groups analyze cases and propose individualized management plans, including pharmacological and non-pharmacological treatments (lifestyle modifications, dietary changes, regeminal therapy). • Students are given two cases—one where standard pharmacological treatments were used and another managed with both contemporary and Unani treatments. Students discuss differences in outcomes, adherence, and patient satisfaction. • In small groups, students predict patient outcomes for various treatment plans (lifestyle changes only, medication only, integrated approach). Follow-up case data are provided to assess actual outcomes, allowing students to adjust management plans as needed.
NLHT29.2	Treatment plan for Dā' al-Qalb Ri'wī (Cor Pulmonale)	<p>1. Case-Based Learning (30 minutes)</p> <p>Provide students with a detailed case study of a patient with Cor Pulmonale. Students analyze the patient's history, symptoms, and clinical findings to develop a treatment plan that incorporates both modern and Unani medicine approaches. They discuss pharmacological management, lifestyle changes, respiratory therapy, and Unani interventions, justifying each choice.</p> <p>2. Small Group Discussions (30 minutes)</p> <p>Divide students into small groups and assign each group an aspect of Cor Pulmonale treatment (e.g., pharmacological therapy, lifestyle adjustments, Unani</p>

		<p>therapies). Groups research their assigned topic and present to the class, followed by group discussion on how each element fits into an integrative care model.</p> <p>(Total Duration: 60 mins)</p> <p>3. Peer Learning (Optional):</p> <p>Students work together to create a concept map of the holistic treatment approach for Cor Pulmonale. This includes detailing interventions from both modern and Unani perspectives, like medication protocols, diet modifications, and Unani practices (e.g., dietotherapy, regimens). Each student presents a part of the map, teaching their peers about how it contributes to overall patient care.</p> <p>4. Self-Directed Learning (SDL) Modules (Optional):</p> <p>Create an SDL module where students research Cor Pulmonale treatments in modern and Unani medicine. They complete guided questions, comparing approaches and identifying potential benefits and limitations of each. Afterwards, they submit a summary of their holistic treatment approach.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP29.1	Diagnostic Approach to patient with Ḍaghṭ al-Dam Qawī (Hypertension)	<p>1. Case-Based Learning (40 minutes)</p> <ul style="list-style-type: none"> Activity: Present a complex case of a patient with hypertension, including detailed history, blood pressure readings, and physical findings. Divide students into small groups to discuss the patient's assessment, including interpreting blood pressure readings and identifying critical clinical features.

- Assign each student a case study of a hypertensive patient with varying clinical presentations. Students prepare a structured presentation including interpretation of blood pressure measurements, history, physical exam findings, and a differential diagnosis. Each student presents their case to the class, followed by a Q&A session.
- Provide cases with hypertension and other potential differential diagnoses. Students discuss and identify which aspects of the history and physical exam align with hypertension versus other conditions, promoting diagnostic reasoning.

2. Role Play (40 minutes)

- Students alternate roles as the clinician and a hypertensive patient, practicing history-taking, measuring blood pressure, and identifying key physical signs. The "patient" provides feedback on communication and clarity, while peers observe and give constructive feedback on clinical techniques.
- Students perform a complete assessment in pairs or small groups, including blood pressure measurement, history, and examination techniques, under instructor supervision. The instructor observes each pair and provides targeted feedback on technique and interpretation accuracy.

3. Simulation (40 minutes)

- Create simulated hypertension scenarios with "patients" presenting specific symptoms (e.g., headache, dizziness, chest pain) to prompt comprehensive assessments. Students take histories, perform measurements, and make initial diagnoses.

		<ul style="list-style-type: none"> In groups, students perform hypertension assessments while peers observe using a checklist (e.g., checking blood pressure technique, accuracy of questioning). Observing peers provide structured feedback, focusing on both technical skills and interaction quality. <p>(Total Duration: 120 mins)</p>
NLHP29.2	<p>Counselling patients with Daghṭ al-Dam Qawī (Hypertension) on lifestyle modification.</p>	<p>1. Case-Based Learning (60 minutes)</p> <p>Provide students with a case study of a hypertensive patient resistant to lifestyle changes. The case includes patient demographics, medical history, and specific reasons for reluctance (e.g., cultural dietary preferences, lack of time for exercise). Students work in groups to analyze the case, identify barriers, and propose tailored counselling strategies to help the patient overcome these challenges.</p> <p>2. Role Play (60 minutes)</p> <ul style="list-style-type: none"> Students pair up and take turns role-playing as the clinician and the hypertensive patient. The “clinician” practices counselling techniques, focusing on explaining lifestyle modifications empathetically and addressing patient questions. Observers and the “patient” provide feedback on clarity, empathy, and the effectiveness of communication. A student assumes the role of a clinician counseling a “patient” (another student) who expresses concerns or resists certain lifestyle changes. The “clinician” addresses these concerns, encourages motivation, and suggests alternative strategies where necessary. In small groups, each student takes on a different healthcare role (nutritionist, fitness trainer, Unani practitioner) in a simulated counselling session for a hypertensive patient. Each “professional” contributes specific advice, and the “patient” receives a comprehensive plan.

		(Total Duration: 120 mins)								
Topic 30 أمراض الجهاز اللموي والدموي والعلوي Amrād-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System) (LH : 8, NLHT: 7, NLHP: 5 hours)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1	Explain nomenclature of Su al Qiniya and elucidate correlation between Sū' al-Qinya and Ḍu'f al- Kabid.	CK	MK	K	L&PPT , DIS	QZ , T-CS	F&S	3	-	LH
CO1	Identify and discuss the various causes and risk factors associated with Sū' al-Qinya including physiological and environmental factors. Enumerate its causes and clinical features.	CK	MK	K	L&GD, L&PPT	T-CS, QZ	F&S	3	-	LH
CO1, CO5	Explain the classical principles of management for Sū'al-Qinya integrating dietary therapy and essential dietary guidelines, including the importance of dietary refrainment and lifestyle modifications to enhance the outcomes.	CAP	DK	KH	CBL, PL, L&GD, RP	CR-RED, PA, CL-PR	F&S	3	-	NLHT30.1
CO1	Define Anaemia and discuss its Classification, clinical presentation, and diagnosis	CAP	MK	KH	PBL, CBL, L&GD	VV-Viva, CBA, T-CS, SP	F&S	3	-	LH
CO3	Demonstrate the ability to develop a comprehensive understanding of treatment plan for Anaemia integrating holistic approaches of Unani medicine including dietary modifications and lifestyle changes and recent contemporary knowledge.	CC	MK	KH	L&GD	QZ , CBA, T-CS	F&S	3	-	LH
CO1	Demonstrate the ability to develop a comprehensive understanding of thalassemia and sickle cell anaemia as inherited hemoglobinopathies by analyzing their genetic classifications and basic clinical features.	CC	NK	KH	CBL, PL, SDL, PBL	QZ , PUZ, P-VIVA	F&S	3	-	NLHT30.2

CO3	Demonstrate the ability to order and interpret biochemical investigations for anaemia, particularly for identifying and differentiating underlying causes, including iron deficiency, vitamin B12/folate deficiency and haemolysis.	PSY-COR	MK	SH	PBL, LRI, CBL, SIM	CBA, T-CS	F&S	3	-	NLHP30.1
CO2, CO5	Demonstrate effective communication skills to educate and counsel patients on dietary modifications to manage and prevent anaemia, with a focus on the importance of iron, vitamin B12, and folate-rich diets.	AFT-VAL	MK	SH	RP	PA, SP	F&S	3	-	NLHP30.2
CO1, CO3	Describe causes, clinical features and complications of Haemophilia. Also discuss the clinical presentation, differential diagnosis and diagnosis of Haemophilia	CK	DK	KH	DIS, PBL, CBL	T-CS, CBA	F&S	3	-	LH
CO3	Develop a comprehensive understanding of treatment plan for Haemophilia integrating holistic treatment approaches of Unani medicine and recent contemporary knowledge	CC	DK	KH	CBL, L&GD, L&PPT	T-CS, CBA	F&S	3	-	NLHT30.3
CO1	Define and describe leukaemia, its risk factors with a special emphasis on its classification	CK	NK	K	L&GD, L&PPT	S-LAQ, CR-RED, M-POS, CL-PR	F&S	3	-	LH
CO1	Discuss Acute and chronic leukaemia with its clinical features, investigations, staging, differential diagnosis, prognosis and management strategies.	CK	NK	K	LS, SDL	COM, VV-Viva, CL-PR	F&S	3	-	NLHT30.4
CO3	Demonstrate the ability to interpret Complete Blood Count (CBC) and Differential Count results in suspected leukaemia cases by identifying key hematologic abnormalities.	PSY-GUD	DK	SH	LRI	P-EXAM, SP, P-VIVA	F&S	3	-	NLHP30.3
CO1, CO3	Define Lymphomas and describe Hodgkin's and non-Hodgkin's lymphoma with etio-pathogenesis, clinical	CK	NK	K	L&GD	QZ, C-VC	F&S	3	-	LH

	features, investigations, staging, differential diagnosis and prognosis.									
CO3	Discuss management of Hodgkin's and non- Hodgkin's lymphoma incorporating conventional treatment (chemotherapy, radiation therapy) with Unani treatment.	CAN	NK	KH	SDL	T-CS, CBA	F&S	3	-	NLHT30.5

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT30.1	Management Plan of Sū'al-Qinya	<p>1. Case-Based Learning (20 minutes)</p> <ul style="list-style-type: none"> Present students with a clinical case of a patient diagnosed with Su al Qinya. The case should include details about the patient's symptoms, lifestyle, and dietary habits. Students will work in small groups to analyze the case and develop a management plan that incorporates classical principles of management, dietary therapy, and dietary guidelines specific to the condition. Each group will then present their management plan to the class, explaining their rationale for the dietary choices and guidelines proposed. <p>2. Role Play (20 minutes)</p> <ul style="list-style-type: none"> Organize a role-playing scenario where one student acts as a healthcare provider (e.g., Unani physician) and another as a patient with Su al Qinya. The provider discusses the condition, explaining the classical management principles, dietary therapy, and necessary dietary guidelines to the patient, emphasizing dietary restraint and lifestyle changes.

		<ul style="list-style-type: none"> • After the role play, classmates can provide feedback on the effectiveness of communication and the accuracy of information shared. • This will develop communication skills and the ability to convey complex dietary management principles effectively. <p>3. Small Group Discussions (20 minutes)</p> <ul style="list-style-type: none"> • Divide students into small groups and assign each group a specific aspect of managing Su al Qiniya, such as: Dietary therapy options, Importance of dietary refrainment, Guidelines for meal planning • Each group will research their assigned topic, preparing key points to share with the larger class. Following their presentations, facilitate a class discussion to explore how each aspect interrelates within the management framework. <p>(Total Duration: 60 mins)</p> <p>4. Peer Learning (optional)</p> <ul style="list-style-type: none"> • Assign each student a topic related to Su al Qiniya management (e.g., specific dietary recommendations, types of foods to avoid, etc.). • Each student prepares a short teaching session (10-15 minutes) for their peers on their topic, using visual aids or handouts if desired. They should explain how their topic fits into the broader management principles. • After the presentations, open the floor for questions and discussions to reinforce learning.
NLHT30.2	Clinical Recognition of thalassemia and sickle cell anaemia	<p>1. Case-Based Learning (30 minutes)</p> <ul style="list-style-type: none"> •

- Present a case scenario of a young patient diagnosed with either thalassemia or sickle cell anemia, covering family history, genetic background, and clinical symptoms.
- Students will work in small groups to analyze the genetic inheritance pattern, clinical presentation, and possible complications associated with each condition.
- Groups will present their findings, highlighting how genetic mutations influence clinical outcomes and explaining their chosen approach to managing patient symptoms.

2. Problem-Based Learning (30 minutes)

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- Present students with a problem scenario, such as a couple with a known family history of hemoglobinopathies considering family planning.
- Students research and present on the genetic risk assessment, diagnostic options, and the potential for genetic counseling in reducing risks for offspring.
- They will also evaluate how early diagnosis impacts management and patient quality of life.

(Total Duration: 60 mins)

3. Peer Learning (optional)

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- Divide students into pairs or small groups. Each group researches one aspect of thalassemia or sickle cell anemia, such as: Genetic mutations and classifications, Clinical features and symptom management, Diagnostic procedures and lab findings

		<ul style="list-style-type: none"> • Each group presents a mini-lecture to their peers, using visuals and simple explanations, followed by a Q&A session to reinforce understanding. <p>4. Self-Directed Learning (optional)</p> <ul style="list-style-type: none"> • • Provide students with structured SDL modules, including readings, videos, and online resources on hemoglobinopathies. • Assign reflection questions, such as explaining why thalassemia and sickle cell anemia are inherited disorders, comparing their clinical features, and discussing the genetic basis for each. • Students complete a reflective summary or answer questions, discussing how genetic mutations impact disease presentation and patient management.
NLHT30.3	Management strategies of Haemophilia	<p>1. Self-Directed Learning (30 minutes)</p> <ul style="list-style-type: none"> • Students receive a structured guide or list of recommended resources (textbooks, journal articles, online lectures) on management of Haemophilia, with • Provide students with hypothetical patient cases presenting with symptoms of Haemophilia. Ask them to outline the management plan. • Assign students to research management strategies for Haemophilia. Students write a brief comparative report, summarizing each approach. <p>2. Library Session Activities (30 minutes)</p> <ul style="list-style-type: none"> • Students visit the library to locate and review core textbooks, clinical guidelines, and recent articles management of Haemophilia. They make

		<p>notes on clinical features, staging, and differential diagnosis, synthesizing this information into a summary document.</p> <ul style="list-style-type: none"> • Guide students in using online journal databases (e.g., PubMed, ScienceDirect) within the library to find recent articles on management strategies of Haemophilia. Students compile findings and discuss them with a faculty member or in a study group. • In small groups, students use library resources to research conditions that mimic leukemia's clinical features (e.g., lymphoma, aplastic anemia). They create a summary chart detailing differentiating features for each condition, sharing their findings with peers. • Assign students to research the staging systems for leukemia (e.g., FAB, WHO classifications) and prognosis factors. Students prepare a short presentation or infographic summarizing their findings and share with peers in the library study space. <p>(Total Duration: 60 mins)</p>
NLHT30.4	Concept and management of Acute and chronic leukaemia	<p>1. Self-Directed Learning (60 minutes)</p> <ul style="list-style-type: none"> • Students receive a structured guide or list of recommended resources (textbooks, journal articles, online lectures) on acute and chronic leukemia, with specific sections to focus on such as clinical features, investigations, and staging. • Provide students with hypothetical patient cases presenting with symptoms of acute or chronic leukemia. Ask them to outline the clinical features, differential diagnosis, and recommended investigations for each case. • Students individually research and create flowcharts on the investigative pathways for acute versus chronic leukemia, including laboratory and

		<p>imaging studies (e.g., CBC, bone marrow biopsy, genetic testing). They also research prognostic factors and staging classifications.</p> <ul style="list-style-type: none"> • Assign students to research management strategies for both acute and chronic leukemia, focusing on differences in chemotherapy protocols, stem cell transplantation, and supportive care. Students write a brief comparative report, summarizing each approach. <p>2. Library Session (60 minutes)</p> <ul style="list-style-type: none"> • Students visit the library to locate and review core textbooks, clinical guidelines, and recent articles on leukemia. They make notes on clinical features, staging, and differential diagnosis, synthesizing this information into a summary document. • Guide students in using online journal databases (e.g., PubMed, ScienceDirect) within the library to find recent articles on leukemia prognosis and new management techniques, such as CAR T-cell therapy. Students compile findings and discuss them with a faculty member or in a study group. • In small groups, students use library resources to research conditions that mimic leukemia's clinical features (e.g., lymphoma, aplastic anemia). They create a summary chart detailing differentiating features for each condition, sharing their findings with peers. • Assign students to research the staging systems for leukemia (e.g., FAB, WHO classifications) and prognosis factors. Students prepare a short presentation or infographic summarizing their findings and share with peers in the library study space. <p>(Total Duration: 120 mins)</p>
NLHT30.5	Management strategies of Hodgkin's and non- Hodgkin's lymphoma.	1. Self-Directed Learning (120 minutes)

		Provide students with a curated list of resources, including articles, case studies, and research papers on the integration of Unani and conventional treatments in lymphoma management. Students can summarize findings on chemotherapy, radiation therapy, and Unani interventions like dietotherapy and medicines used, followed by creating a visual flowchart comparing conventional and Unani approaches. This promotes independent exploration of treatment modalities.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP30.1	Investigations to find out cause of Faq'r al-Dam anemia	<p>1. Case-Based Learning (30 minutes)</p> <ul style="list-style-type: none"> • Present students with a clinical case scenario of a patient with anemia, providing symptoms, medical history, and initial findings. • Students analyze the case, order relevant biochemical investigations (e.g., serum ferritin, vitamin B12, folate, and reticulocyte count) and interpret lab results to identify the cause of anemia. • During a debrief, students discuss findings, differential diagnoses, and justify their investigation choices. <p>2. Problem-Based Learning (30 minutes)</p> <ul style="list-style-type: none"> • Organize students into small groups, providing each group with different anemia cases (iron deficiency anemia, megaloblastic anemia, hemolytic anemia). • Groups identify investigation needs and work through lab data to determine the specific type and cause of anemia. • Each group presents their findings, highlighting how different tests lead to different diagnoses, followed by a feedback session.

		<p>3. Lab Report Interpretation (30 minutes)</p> <ul style="list-style-type: none"> • Students receive simulated lab reports (CBC, serum ferritin, vitamin B12, folate levels, etc.) related to anemia cases. • They practice interpreting each test, correlating lab values with potential causes of anemia, and making decisions about the next steps. • Following this, they discuss patterns observed and how specific lab findings guide diagnosis. <p>4. Simulated Patient Interviews (30 minutes)</p> <ul style="list-style-type: none"> • Students practice interviewing a simulated patient with anemia symptoms, gathering clinical history, and determining relevant biochemical tests to order. • After conducting the interview, students document their interpretation of the lab findings and form a differential diagnosis. • This is followed by a reflective session to discuss their diagnostic choices and any challenges faced. <p>(Total Duration: 120 mins)</p>
NLHP30.2	<p>Counselling patients on dietary modifications to manage and prevent Faq'r al-Dam (Anemia)</p>	<p>1. Role Play (60 minutes)</p> <ul style="list-style-type: none"> • Assign student pairs: one as the "counsellor" and the other as the "patient" with a specific anaemia type. • Provide patient profile cards with tailored dietary needs and common dietary misconceptions. • "Counsellor" counsels the "patient" on dietary changes, discussing food choices, portion sizes, and cooking tips for nutrient absorption. • Emphasize listening to patient concerns and correcting any misconceptions.

		<ul style="list-style-type: none"> • Peer and instructor feedback on communication style and clarity. • Self-reflection on effective techniques and areas for improvement. • Group discussion on challenges and strategies for empathetic, culturally sensitive counselling. • Summarize key learning points for patient-centered dietary guidance in anaemia. <p>2. Patient Education Session (30 mins):</p> <ul style="list-style-type: none"> • The student playing the "doctor" should provide a brief educational session about dietary modifications to manage and prevent anaemia • Emphasis should be on clear and understandable language, avoiding medical jargon, and providing information in an empathetic tone. <p>3. Peer Feedback and Reflection (30 mins):</p> <ul style="list-style-type: none"> • After each role-play, the student in the doctor's role receives feedback from their peer acting as the patient. This feedback should focus on how empathetic and respectful the communication was, as well as the clarity and comfort provided. • Discuss what could be improved to ensure patients feel supported and understood. <p>(Total Duration: 120 mins)</p>
NLHP30.3	<p>Interpretation of Complete Blood Count (CBC) and Differential Count results in suspected leukaemia</p>	<p>1. Lab Report Interpretation (60 minutes):</p> <ul style="list-style-type: none"> • Present students with anonymized case reports featuring CBC and differential counts. Students individually review reports, identify abnormalities (e.g., leukocytosis, anaemia, thrombocytopenia), and

		<p>propose potential diagnoses followed by group discussion or a written summary of findings for each case to evaluate accuracy.</p> <ul style="list-style-type: none"> • Provide sample CBC reports highlighting different leukaemia subtypes (e.g., AML, CML). An instructor-led session explains key diagnostic features in these reports, followed by student practice sessions in pattern recognition. • Show students sequential CBC reports from the same patient over weeks. Students observe and interpret changes, recognizing patterns that indicate disease progression, response to treatment, or complications.
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Topic 31 طبي اخلاقيات – Tibbi Akhlaqiyāt (Medical Ethics) (LH : 0, NLHT: 0, NLHP: 13 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO6	Display professional and ethical behaviour, including empathy and respect, during patient interactions and physical examinations.	AFT-VAL	MK	SH	RP, SIM	DOPS, DOPS, CHK	F	3	-	NLHP31.1
C02, CO6	Adapt shared decision-making to support patient autonomy by actively discussing patient preferences and values.	AFT-SET	MK	SH	L&GD, CBL	PRN, SP, P-RP, Portfolios	F	3	-	NLHP31.2
CO6	Apply principles of confidentiality and patient privacy in all aspects of care.	AFT-RES	MK	SH	CBL, SIM, RP, L_VC	SBA, P-EXAM, PA, OSCE	F	3	-	NLHP31.3
C02, CO6	Demonstrate the ability to obtain informed consent by effectively communicating risks and benefits.	PSY-GUD	MK	SH	RP, SIM	PA, OSCE	F	3	-	NLHP31.4
CO6	Recognize and maintain professional boundaries while managing conflicts of interest	AFT-CHR	MK	SH	DIS, CBL	SBA, CBA	F	3	-	NLHP31.5

CO6	Demonstrate clinical judgment in evaluating patient conditions to determine when to administer Unani medicine and when to refer patients for further evaluation or treatment in a conventional healthcare setting.	PSY-COR	MK	SH	SIM, CBL	DOPS, CBA, DOPS	F	3	-	NLHP31.6
CO6	Demonstrate the ability to accurately complete and issue a medical certificate in accordance with ethical guidelines, ensuring confidentiality, truthfulness, and adherence to professional standards.	PSY-COR	MK	SH	RP, SIM, D	P-EXAM, CBA, OSCE	F	3	-	NLHP31.7
CO6	Display the ability to accurately and ethically report medicolegal cases by identifying reportable cases, documenting findings, and following legal protocols while safeguarding patient confidentiality.	AFT-CHR	MK	SH	ML, SIM, CBL	CHK, P-EXAM, OSCE	F	3	-	NLHP31.8

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
NLHP31.1	Professionalism and Empathy in Patient Interaction	<p>1. Role-playing (30 minutes):</p> <p>Students practice patient interactions in pairs, with one acting as the patient and the other as the clinician. A faculty member observes and provides feedback on empathy, respect, and professionalism.</p> <p>2. Simulation (30 minutes)</p>

		<p>Students interact with a standardized patient, focusing on building rapport, showing empathy, and maintaining professionalism. Faculty uses a checklist to assess specific behaviors and responses.</p> <p>(Total Duration: 60 mins)</p>
NLHP31.2	Shared Decision-Making and Patient Autonomy in Clinical Practice	<p>1. Case-based Learning (30 minutes)</p> <p>Students work in small groups to review a case where patient preferences are critical in the decision-making process. They discuss how to involve patients and respect their choices.</p> <p>2. Group Discussion(30 minutes)</p> <p>Students discuss real or hypothetical cases where shared decision-making is essential, reflecting on how to honor patient autonomy and personal values. Faculty assesses students on their participation and insights.</p> <p>(Total Duration: 60 mins)</p>
NLHP31.3	Upholding Confidentiality and Patient Privacy in Clinical Settings	<p>1. Lecture & Video Demonstration (60 minutes):</p> <p>Faculty discusses the importance of confidentiality and patient privacy, providing real-world examples and legal frameworks. Students watch a video showing proper and improper handling of patient privacy, followed by a discussion.</p> <p>2. Case Based Learning (60 minutes):</p> <p>Students review case scenarios and identify where confidentiality could be at risk, discussing ways to mitigate these risks.</p> <p>(Total Duration: 120 mins)</p>

NLHP31.4	Informed Consent in Clinical Practice	<p>1. Role Play (60 minutes)</p> <ul style="list-style-type: none"> • Students are divided into pairs, with one acting as the healthcare provider and the other as the patient. • Each pair receives a specific medical procedure scenario requiring informed consent. • Students practice obtaining informed consent by clearly explaining the risks and benefits of the procedure. • After each role play, peers and faculty provide constructive feedback on communication effectiveness and ethical considerations. <p>2. Simulation (60 minutes)</p> <ul style="list-style-type: none"> • Students interact with a standardized patient portraying various emotional responses (e.g., anxious, confused) when discussing a medical procedure. • Students practice the informed consent process, adapting their communication style to address the patient's concerns and emotions. • Faculty and peers provide feedback on the effectiveness of the communication strategies used, focusing on empathy and clarity. <p>(Total Duration: 120 mins)</p>
NLHP31.5	Professional Boundaries and Conflict of Interest Management	<p>1. Small Group Discussion (60 minutes):</p> <p>Students discuss scenarios involving conflicts of interest, exploring ways to maintain boundaries and professionalism.</p> <p>2. Case Based Learning (60 minutes):</p>

		<p>Faculty presents case vignettes where students analyze possible conflicts of interest and propose ethical solutions.</p> <p>(Total Duration: 120 mins)</p>
NLHP31.6	Clinical Decision-Making	<p>Faculty provides cases where students must decide whether to treat or refer, discussing indications for Unani medicine and when conventional referral is warranted.</p> <p>(Total Duration - 60 Minutes)</p>
NLHP31.7	Ethics related to issue of Different Medical Certificates	<p>1. Demonstration (40 minutes):</p> <p>Begin with a live demonstration by the instructor on completing a medical certificate, focusing on each required field, confidentiality, and ethical considerations. This should include a discussion on scenarios requiring discretion and truthfulness. After the demonstration, students practice under supervision using mock patient cases. Each case can have ethical dilemmas (e.g., sensitive information, patient privacy concerns) to reinforce professional handling.</p> <p>2. Role Play (40 minutes):</p> <p>Divide students into pairs where one acts as a doctor and the other as a patient. Provide case scenarios that involve ethical dilemmas (e.g., requests for false information, incomplete documentation). After filling out the certificate, the "doctor" explains their reasoning to a small group, emphasizing ethical decisions made. Follow up with feedback from peers and the instructor to reinforce learning.</p> <p>3. Simulation (40 minutes):</p> <p>Use standardized patients who have backstories and specific requests, including those that may test ethical boundaries. Students complete certificates based on the</p>

		<p>simulated patient interaction. After each simulation, students debrief with the instructor, discussing both the technical and ethical aspects of their decisions.</p> <p>(Total Duration: 120 mins)</p>
NLHP31.8	<p>Ethical and Accurate Reporting of Medicolegal Cases</p>	<p>1. Case-Based Learning (40 minutes):</p> <ul style="list-style-type: none"> • Provide students with a series of detailed case studies that involve different medicolegal scenarios (e.g., cases of malpractice, child abuse, or elder neglect). Each case should include patient background, clinical findings, and a dilemma regarding reporting. • Divide students into small groups., assign each group a different case study, ask them to analyze the case and identify: What makes it a reportable case., Ethical considerations in the reporting process, The legal protocols that must be followed. • Each group presents their findings to the class, highlighting key points of ethical and legal importance. <p>2. Simulation (40 minutes):</p> <ul style="list-style-type: none"> • Set up a simulation where students interact with a standardized patient portraying a scenario that requires medicolegal reporting (e.g., a patient disclosing abuse). Prepare a script and brief for the standardized patient outlining their role and the information to disclose. • Have students engage with the patient, practicing their communication skills while ensuring they gather necessary information for reporting. • After the encounter, provide feedback on their performance, focusing on ethical considerations and documentation practices. <p>3. Mock Reporting Session(40 minutes):</p>

		<ul style="list-style-type: none"> • Create a mock environment where students must complete the reporting process for a medicolegal case. • Present a simulated medicolegal case with all relevant details. Students must document their findings, complete necessary forms, and prepare to present their report to a simulated legal authority or healthcare board. • Include feedback sessions where faculty evaluate the accuracy, completeness, and ethical considerations in their reporting. <p>(Total Duration: 120 mins)</p>
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Paper 3 (Moalajat (Medicine) Paper III)

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
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Topic 32 امراض المري Amrāḍ-i-Marī (Diseases of the Oesophagus) (LH : 3, NLHT: 1, NLHP: 3 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	Explain the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of 'Usr al-Bal' (Dysphagia) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L, L&PPT	T-OBT, QZ	F&S	1	-	LH
CO3	Analyse Tashkhīṣ Fāriqa or approach to the patients with 'Usr al-Bal' (Dysphagia).	CAN	MK	KH	L&PPT, L, L&GD	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Inṭibāq al-Marī Achalasia Cardia) as per Unani and contemporary medical sciences.	CC	MK	K	L, L&GD, L&PPT	QZ, T-OBT	F&S	1	H-IJ	LH

CO4	Identify the indications for referral to specialists in complex/severe cases.	CAN	DK	KH	L, L&PPT , L&GD	QZ , T-OBT	F&S	1	-	LH
CO1, CO3	Discuss the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waram-i-Marī (Esophagitis).	CC	NK	K	L&GD, L, L&PPT	T-OBT, QZ	F&S	1	-	LH
CO1, CO3, CO4	<ul style="list-style-type: none"> Explain the etiology, normal defense mechanisms preventing reflux and reflux oesophagitis, clinical features, complications, and investigations, of Taqahqur-i-Marī (Gastro-esophageal reflux disease). Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for GERD along with contemporary medical sciences. Identify the alarming symptoms and indications for referral to specialists in complex/severe cases. 	CAN	MK	KH	FC	O-QZ, CL- PR	F&S	1	-	NLHT32.1
CO2, CO3	Perform history-taking and physical examination for a patient presenting with suspected esophageal disease.	PSY-MEC	MK	SH	SIM	Mini-CEX, OSCE	F&S	1	-	NLHP32.1
CO3	Interpret the results of diagnostic tests for esophageal diseases including Endoscopy, Barium swallow, Manometry, and 24-hour pH monitoring with relevant indications and results.	CE	MK	SH	W	Mini-CEX, Log book	F&S	1	-	NLHP32.2
CO1	Formulate a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common	CS	MK	D	CBL	Log book, Portfolios, PA	F&S	1	-	NLHP32.3

	esophageal diseases, taking into account patient needs and available resources.									
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of esophageal diseases, ensuring empathy and clarity, and educate patients on lifestyle modifications and follow-up care for GERD or other esophageal conditions to support adherence and better outcomes.	AFT-VAL	NK	SH	RP	Log book, PA, Portfolios	F&S	1	-	NLHP32.4

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT32.1	تہہ قرمری Taqahqur-i-Marī (Gastro-esophageal reflux disease)	<p>Flipped Classroom (Duration: 60 minutes)</p> <p>In this activity, students will independently review pre-assigned materials on Taqahqur-i-Marī (Gastro-esophageal reflux disease), including video lectures, reading materials, and case studies on before the scheduled class. These resources will cover the etiology, pathophysiology, clinical presentation, diagnosis, and management of GERD. During the in-class session, students will engage in interactive activities, including case discussions, group problem-solving, and Q&A sessions with facilitators to reinforce understanding and clarify complex concepts. This approach promotes active learning, critical thinking, and application of theoretical knowledge, preparing students to effectively recognize, diagnose, and manage GERD in clinical settings.</p>

Non Lecture Hour Practical

S.No	Name	Description of Practical Activity
NLHP32.1	History taking and physical examination for diseases of the oesophagus	Simulation (Duration: 60 minutes)

		<p>In this simulation-based learning activity, students will practice and refine skills in history-taking and physical examination for patients with suspected esophageal disease. This activity will offer a hands-on, interactive learning experience, allowing students to build confidence in patient assessment in a safe, controlled environment. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials on common esophageal diseases, focusing on relevant history-taking questions (e.g., dysphagia, heartburn, regurgitation) and physical examination techniques.</p> <p>Simulation Setup: In a clinical simulation lab, standardized patients (actors trained to simulate real patients) or manikins will be prepared to present symptoms and signs associated with esophageal diseases like GERD, achalasia, esophagitis or dysphagia.</p> <p>History-Taking: Students, individually or in small groups, will perform history-taking, focusing on symptom onset, frequency, dietary habits, lifestyle factors, and any associated symptoms (e.g., weight loss, pain). They will practice building rapport, asking open-ended questions, and systematically gathering information.</p> <p>Physical Examination: Students will conduct a focused physical examination, including abdominal examination and assessments of general health, to identify any signs that may correlate with esophageal issues.</p> <p>Instructor Feedback: Facilitator will observe and provide individualized feedback on communication skills, clinical reasoning, and examination techniques, helping students refine their approach.</p>
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		<p>Group Reflection and Discussion: Students will debrief as a group, discussing common challenges, differential diagnoses, and key takeaways for handling real-life scenarios involving esophageal diseases.</p>
NLHP32.2	<p>Diagnostic tests Interpretation for Diseases of the Oesophagus</p>	<p>Workshops (Duration: 30 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and fosters critical thinking, teamwork, and the application of theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the oesophagus.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on esophageal diagnostic tests (e.g. endoscopy, barium swallow, manometry, and 24-hour pH monitoring), including indications and result interpretations for diseases of the oesophagus.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications and will correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The Facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for diseases of the oesophagus.</p>

NLHP32.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 60 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-ctivity Preparation: Students will review assigned relevant reading materials on common esophageal diseases (e.g., GERD, esophagitis, achalasia cardia, and dysphagia), focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively formulate a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP32.4	Patient Education on Chronic Oesophageal Diseases	<p>Role Plays (Duration: 30 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and</p>

		<p>outcomes regarding diseases of the oesophagus, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as a healthcare provider, patient, and caregiver. Provide background materials on common diseases of the oesophagus, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the oesophagus. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a chronic oesophageal condition.</p> <p>Role-Playing Session: Providers educate patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize the use of empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions.</p>
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Topic 33 امراض المعدة Amrāḍ-i-Mi'da (Diseases of the Stomach) (LH : 8, NLHT: 5, NLHP: 13 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
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CO1, CO3	<ul style="list-style-type: none"> Differentiate between Ḍu'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm as per Unani medicine. Explain the Asbāb, Alāmāt, Tashkhīṣ Fāriqa, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḍu'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm (Delayed digestion, Dyspepsia, Perverted digestion and failure of digestion) as per Unani and contemporary medical sciences. Discuss the etiology, clinical features, diagnosis (as per Rome IV diagnostic criteria for functional dyspepsia), investigations, and management of functional dyspepsia. 	CAN	MK	KH	BL	O-QZ	F&S	1	-	NLHT33.1
CO1, CO3	Explain the Asbāb, Aqsām, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waram-i-Mi'da (Gastritis) as per Unani and contemporary medical sciences.	CC	MK	K	EDU	CL-PR, QZ	F&S	1	-	NLHT33.2
CO1, CO3, CO4	<ul style="list-style-type: none"> Define peptic ulcer disease, including types (gastric and duodenal ulcers). Discuss the aetiology, risk factors, pathogenesis, clinical features, complications, investigations including tests for Helicobacter pylori infection and medical management (short term and long term) of Qurūḥ-i-Mi'da wa Athna 'Ashrī (Peptic Ulcer Disease / PUD) as per contemporary medical sciences. 	CAN	MK	KH	BS	M-CHT, PUZ, CL-PR, O-QZ	F&S	1	-	NLHT33.3

	<ul style="list-style-type: none"> Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for PUD along with contemporary medical sciences. Identify the indications for referral to specialists in complex/severe cases. 									
CO1, CO3, CO4	<ul style="list-style-type: none"> Explain the Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Qay' al-Dam (Hematemesis) as per Unani and contemporary medical sciences. Identify the indications for referral to specialists in complex/severe cases. 	CAN	MK	KH	IBL	O-QZ, M-CHT	F&S	1	-	NLHT33.4
CO1, CO3	<ul style="list-style-type: none"> Explain the Asbāb, Aqsām, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Fuwāq / Hichkī (Hiccup) as per Unani and contemporary medical sciences. Discuss the causes of hiccups in elderly males and outline the treatment options. 	CC	MK	K	SDL	M-CHT, O-QZ	F&S	1	-	NLHT33.5
CO1, CO3	<ul style="list-style-type: none"> Differentiate between Jū' al-Baqar / Būlīmūs wa Jū' al-Kalb / Al-Shahwa al-Kalbiyya as per Unani medicine. Explain the Vaja-i-tasmīya (etymology), Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of 	CAN	NK	KH	EDU	QZ, CL-PR	F&S	1	-	NLHT33.6

	Jū' al-Baqar / Būlīmūs wa Jū' al-Kalb / Al-Shahwa al-Kalbiyya (Bulimia / Food aversion and Voracious appetite) as per Unani and contemporary medical sciences.									
CO1, CO3	Explain the Asbāb, Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waja' al-Mi'da (Gastralgia) as per Unani and contemporary medical sciences.	CC	MK	K	L, L&PPT , L&GD	T-OBT, QZ	F&S	1	-	LH
CO4	Identify the indications for referral to specialists in complex / severe cases of Waja' al-Mi'da.	CAN	MK	KH	L&GD, L&PPT , L	QZ , T-OBT	F&S	1	-	LH
CO1, CO3	Describe the Asbāb, Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ɖu'f al-Mi'da (gastric debility) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L&PPT , L	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Discuss the Asbāb, Alāmāt, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Nafkh-i-Mi'da (Abdominal bloating) as per Unani and contemporary medical sciences.	CC	MK	K	L, L&PPT , L&GD	QZ , T-OBT	F&S	1	-	LH
CO1, CO3	Explain the Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḥurqat-i-Mi'da (Burning sensation of Stomach) as per Unani and contemporary medical sciences.	CC	MK	K	L&PPT , L, L&GD	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Describe the Asbāb, Alāmāt, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ɖu'f wa Buṭlān Ishteha (Poor Appetite) as per Unani and contemporary medical sciences.	CC	DK	K	L, L&PPT , L&GD	T-OBT, QZ	F&S	1	-	LH

CO1, CO3	Discuss the Vaja-i-tasmīya (etymology), Asbāb, Alāmāt, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Fasād al-Shahwa wa Waḥam (Pica / perversion of Appetite) as per Unani and contemporary medical sciences.	CC	DK	K	L&GD, L, L&PPT	QZ, T-OBT	F&S	1	-	LH
CO1	Differentiate between Qay', Tahawwu', Ghathayān wa Taqallub al-Nafas (Vomiting, Retching, and Nausea) as per Unani medicine.	CAN	DK	KH	L&GD, L&PPT, L	QZ, T-OBT	F&S	1	-	LH
CO1, CO3	Explain the Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Qay', Tahawwu', Ghathayān wa Taqallub al-Nafas (Vomiting, Retching and Nausea) as per Unani and contemporary medical sciences.	CC	DK	K	L, L&PPT, L&GD	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	<ul style="list-style-type: none"> Define carcinoma of the stomach and differentiate between its various types (e.g., adenocarcinoma, lymphoma, gastrointestinal stromal tumors). Describe the risk factors, pathogenesis, clinical manifestations, staging, potential complications, investigations (including laboratory tests, imaging studies, and endoscopic evaluation), and medical management of carcinoma of the stomach as per contemporary medical sciences. 	CC	DK	K	L, L&PPT, L&GD	T-OBT, T-CS, QZ	F&S	1	-	LH
CO3	Illustrate Wujūh-i-Istedlal-i-Amrāḍ-i-Mi'da and its role in the diagnosis of Amrāḍ-i-Mi'da (Diseases of the Stomach) as per Unani medicine.	CAN	MK	KH	TBL	CHK, PA	F&S	1	-	NLHP33.1

CO2, CO3	Conduct history-taking and perform the correct technique for abdominal examination focusing on the stomach area to identify tenderness, masses, and other findings for patients presenting with symptoms indicative of stomach diseases.	PSY-MEC	MK	SH	RP	Mini-CEX, DOAP, OSCE	F&S	1	-	NLHP33.2
CO3	Interpret the results of diagnostic tests for diseases of the stomach (e.g., upper GI endoscopy, H-pylori testing, biopsy, X-rays, CT scans, and MRI etc.) with relevant indications and results.	CE	MK	SH	W	Mini-CEX, Log book	F&S	1	-	NLHP33.3
CO1	Develop a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common diseases of the stomach considering patient needs, preferences, and available resources.	CS	MK	D	CBL	Portfolios, PA, Log book	F&S	1	-	NLHP33.4
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of diseases of the stomach, ensuring empathy, clarity, and educating patients on lifestyle modifications, dietary advice, and the importance of follow-up for chronic gastric conditions (e.g., gastritis, peptic ulcer disease, Jū' al-Baqar wa Jū' al-Kalb etc.) to encourage positive behaviour change, and to support adherence and better outcomes.	AFT-VAL	NK	SH	RP	Portfolios, OSCE, Log book, PA	F&S	1	-	NLHP33.5
CO1, CO4	Build competency in essential procedural skills relevant to managing stomach diseases such as Nasogastric/ Ryle's Tube insertion, and gastric aspiration.	PSY-GUD	MK	SH	SIM	DOPS, OSPE, DOPS, PA	F&S	1	-	NLHP33.6
CO5, CO6	Display professionalism and ethical decision-making in managing patients with stomach disorders, especially in	AFT-VAL	NK	SH	RP	PA, Portfolios,	F&S	1	-	NLHP33.7

	cases involving chronic illness or life-threatening conditions like cancer.					Log book, OSCE				
CO3, CO4	<ul style="list-style-type: none"> Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Saraṭān-i-Mi'da (Carcinoma of stomach) along with contemporary medical sciences. Identify the alarming symptoms and indications for referral to specialists in complex/severe cases. 	CAN	DK	KH	L, L&GD, L&PPT	SP, T-CS, INT, CL-PR	F&S	1	-	LH

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT33.1	Ḍu'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm (Delayed digestion, Dyspepsia, Perverted digestion and failure of digestion)	<p>Blended Learning (Duration: 30 minutes)</p> <p>In this activity, students will engage with online and in-person resources to develop a comprehensive understanding of the condition. This approach will not only enhance active learning, reinforce clinical reasoning, and prepare students to effectively manage these conditions in patient care settings but also will encourage independent study, peer interaction, and active application of knowledge. The steps are as follows:</p> <p>Pre-Class Preparation: Students will review online and offline resources, including video lectures and reading materials covering the etiology, symptoms, diagnostic approaches, and management of Ḍu'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm.</p>

		<p>In-Class Activity: In small groups, students will discuss case scenarios to identify symptoms, suggest diagnostic tests, and propose treatment plans.</p> <p>Interactive Session: Faculty will lead a Q&A session, clarifying doubts and reinforcing key concepts.</p> <p>Post-Class Assignment: Students will complete an online quiz to assess understanding and receive immediate feedback for further learning.</p>
NLHT33.2	Waram-i-Mi'da (Gastritis)	<p>Edutainment (Duration: 60 minutes)</p> <p>This edutainment-based session on Waram-i-Mi'da (Gastritis) blends education with engaging activities to enhance understanding and retention. Students will explore Waram-i-Mi'da (Gastritis) through interactive media, such as animated videos, quizzes, role-playing scenarios, and case-based games, designed to illustrate the causes, pathophysiology, symptoms, diagnosis, and management of gastritis in an enjoyable format. By actively participating in these activities, students can deepen their understanding of gastritis in a memorable way, while fostering teamwork, clinical reasoning, and problem-solving skills. This approach supports an engaging, student-centered learning experience, enhancing their preparedness for clinical practice.</p>
NLHT33.3	Qurūḥ-i-Mi'da wa Athna 'Ashrī (Peptic Ulcer Disease / PUD)	<p>Brainstorming (Duration: 60 minutes)</p> <p>In this session, students will collaborate in small groups to explore key aspects of the Qurūḥ-i-Mi'da wa Athna 'Ashrī (Peptic ulcer disease / PUD) through guided discussion and idea generation. Prior to the session, students will be assigned foundational reading materials covering the pathophysiology, risk factors, clinical presentation, diagnosis, and management of PUD. During the brainstorming activity, each group will identify and discuss various dimensions of the disease, including its causes (such as H. pylori infection and NSAID use), treatment</p>

		<p>options, and preventive measures. Facilitators will encourage students to share their insights, pose questions, and challenge each other's ideas to foster critical thinking and deepen their understanding. The collaborative nature of this activity promotes active engagement, enhances knowledge retention, and prepares students for real-world clinical scenarios involving PUD.</p>
NLHT33.4	Qay' al-Dam (Hematemesis)	<p>Inquiry-Based Learning (Duration: 30 minutes)</p> <p>In this session, students will explore the Qay' al-Dam (Hematemesis) through guided investigation and problem-solving. Prior to class, students will review foundational materials on the causes, pathophysiology, and clinical presentation of Qay' al-Dam (Hematemesis). During the session, students will be presented with a clinical scenario involving a patient with hematemesis and work in small groups to formulate diagnostic hypothesis, identify relevant tests, and propose initial management steps. The facilitator will guide students with probing questions to encourage deeper analysis and clinical reasoning. This activity fosters critical thinking, teamwork, and hands-on problem-solving, equipping students to approach hematemesis cases systematically and with clinical confidence.</p>
NLHT33.5	Fuwāq / Hichkī (Hiccup)	<p>Self-directed Learning (Duration: 60 minutes)</p> <p>In this activity, students will independently explore the etiology, pathophysiology, clinical significance, and management of Fuwāq / Hichkī (Hiccup) through curated resources, including textbooks, journal articles, and case reports. Learning materials will cover common causes (e.g., gastric distension, nerve irritation) and less common but clinically significant causes (e.g., CNS lesions, metabolic disturbances etc.). Students will complete guided questions to consolidate their understanding and may prepare brief case summaries of patients with persistent or intractable hiccups to discuss in small groups. This activity encourages active learning, enhances critical thinking, and builds foundational knowledge of an</p>

		often-overlooked symptom, preparing students to approach it thoughtfully in clinical practice.
NLHT33.6	Jū' al-Baqar / Būlīmūs wa Jū' al-Kalb / Al-Shahwa al-Kalbiyya (Bulimia / Food aversion and Voracious appetite)	<p>Edutainment (Duration: 60 minutes)</p> <p>This activity on Jū' al-Baqar/Būlīmūs wa Jū' al-Kalb/Al-Shahwa al-Kalbiyya leverages engaging media to deepen student's understanding of these eating disorders. Students will explore these topics through carefully selected films, documentaries, or simulated patient scenarios that depict real-life challenges, symptoms, and the psychological impact of Būlīmūs and compulsive eating. Following the media session, students will participate in reflective discussions, role-playing, and group analysis to connect clinical knowledge with patient experiences, including diagnostic criteria, behavioural and physiological symptoms, and management approaches. This approach fosters empathy, critical thinking, and a holistic understanding of the complexities surrounding eating disorders in a memorable and impactful way.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP33.1	Unani diagnostic methods for Amrāḍ-i-Mi'da (Diseases of the Stomach)	<p>Team-Based Learning (Duration: 120 minutes)</p> <p>This method will enhance collaborative learning, critical thinking, and diagnostic accuracy by integrating peer input and faculty guidance, equipping students with essential teamwork skills for clinical practice. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned materials of classical Unani texts on Wujūh-i-Istedlal-i-Amrāḍ-i-Mi'da and Tareeqa-i-Tashkhīṣ (diagnostic criteria) for Amrāḍ-i-Mi'da (common stomach diseases).</p>

		<p>Individual Readiness Assurance Test: Each student will complete a short quiz individually to assess baseline understanding of the Unani diagnostic methods.</p> <p>Team Readiness Assurance Test: Students will form teams, discuss the quiz, and retake it together to solidify knowledge and encourage peer learning.</p> <p>Application Exercise: Teams will receive clinical case scenarios and collaboratively diagnose the common diseases of the stomach based on clinical features as per Unani medicine, refining diagnostic reasoning skills.</p> <p>Facilitated Discussion: The facilitator will lead a discussion, reviewing answers and clarifying complex concepts.</p> <p>Reflection: Students will complete a self-assessment on diagnosing stomach diseases based on Unani diagnostic methods, reinforcing critical thinking and diagnostic skills.</p>
NLHP33.2	History-Taking and Per-abdomen Examination for Stomach Diseases	<p>Role Plays (Duration: 120 minutes)</p> <p>This method combines observational learning and supervised practice to build clinical competency in examining patients with stomach disease. The steps are as follows.</p> <p>Pre-Activity Preparation: Students will watch a demonstration video and read guidelines on abdominal examination techniques and history-taking for stomach-related symptoms.</p> <p>Hands-On Practice (Role Play): In pairs, students will practice history-taking and abdominal examination on each other or simulated patients, focusing on identifying tenderness, masses, and relevant findings.</p>

		<p>Faculty Supervision and Feedback: Instructors will observe and provide real-time feedback, correcting techniques and guiding students on interpreting findings.</p> <p>Reflection and Self-Assessment: Students will complete a checklist to self-assess their skills and identify areas for improvement.</p>
NLHP33.3	<p>Diagnostic tests interpretation for Diseases of the stomach</p>	<p>Workshops (Duration: 120 minutes)</p> <p>This interactive workshop will enhance clinical reasoning and practical skills, and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the stomach.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests (e.g. upper GI endoscopy, H-pylori testing, biopsy, X-rays, CT scans, and MRI), including indications and result interpretations for diseases of the stomach.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p>

		<p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for diseases of the stomach.</p>
NLHP33.4	Nuskha Navesī	<p>Case-Based Learning (Duration: 120 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common diseases of the stomach, focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP33.5	Patient Education on Chronic Diseases of the Stomach	<p>Role Plays (Duration: 120 minutes)</p>

This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding stomach diseases, focusing on empathy, clarity, and education. The steps are as follows:

Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on common diseases of the stomach, including common treatment options and lifestyle modifications.

Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the stomach. (Develop specific challenges related to communication and patient education).

Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a chronic gastric condition.

Role-Playing Session: The healthcare Providers will educate patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize the use of empathetic communication, clear language, and active listening).

Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).

Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions.

NLHP33.6	Building Competency in Stomach Disease Procedures	<p>Simulation (Duration: 120 minutes)</p> <p>This approach will build hands-on competency in a safe, supervised environment. The steps are as follows:</p> <p>Demonstration: Faculty will demonstrate nasogastric (Ryle's) tube insertion and gastric aspiration on a mannequin, explaining each step and safety considerations.</p> <p>Hands-On Practice: Students will practice the procedures on mannequins under faculty supervision, focusing on correct technique and patient comfort.</p> <p>Peer Observation: Students will observe peers performing the procedure and provide constructive feedback based on a checklist.</p> <p>Feedback & Reflection: Faculty will provide personalized feedback to each student, followed by a brief group discussion on challenges and best practices.</p> <p>Competency Assessment: Students will complete a checklist-based skills assessment to ensure proficiency and safety in performing these essential procedures.</p>
NLHP33.7	Professionalism and Ethical Decision-Making in Stomach Disorders	<p>Role Plays (Duration: 60 minutes)</p> <p>This activity will enhance empathy, ethical reasoning, and professionalism in managing sensitive cases.</p> <p>Pre-Activity Preparation: Students will review ethical principles and professionalism guidelines relevant to patient care, focusing on cases with chronic or life-threatening stomach disorders, such as cancer.</p>

		<p>Role-Play Activity: In small groups, students will participate in role-playing scenarios where they must navigate challenging interactions, such as delivering difficult news, discussing prognosis, and respecting patient autonomy in treatment decisions.</p> <p>Facilitated Debrief: A faculty member will lead a reflection session, allowing students to discuss their choices, receive feedback on ethical and professional conduct, and consider alternative approaches.</p> <p>Reflection Assignment: Students will submit a brief reflection on how they applied ethical principles and the importance of professionalism in patient care.</p>
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Topic 34 امراض امعاء Amrāḍ-i-Am'ā' (Diseases of the Intestines) (LH : 7, NLHT: 3, NLHP: 6 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3, CO4	<ul style="list-style-type: none"> Describe the aetiology, pathology, clinical features, complications, differential diagnosis, investigations, and treatment of Diqq al-Am'ā' (Intestinal tuberculosis). Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Diqq al-Am'ā' (Intestinal tuberculosis) along with contemporary medical sciences. Identify the indications for referral to specialists in complex / severe cases. 	CAN	MK	KH	GBL	O-QZ, CL-PR	F&S	1	-	NLHT34.1
CO1, CO2, CO3, CO4	<ul style="list-style-type: none"> Define Teḥrīk Mi'v'i sīndrom (Irritable Bowel Syndrome / IBS), its subtypes (IBS-C, IBS-D, IBS-M), list the common risk factors (e.g., stress, 	CAN	MK	KH	PrBL	CL-PR, O-QZ	F&S	1	-	NLHT34.2

	<p>diet, gut-brain axis dysfunction) and identify typical symptoms of IBS (abdominal pain, bloating, altered bowel habits).</p> <ul style="list-style-type: none"> • Explain the pathophysiology of IBS, focusing on gut motility disturbances, visceral hypersensitivity, and the role of psychological factors. • Differentiate IBS from other gastrointestinal disorders (e.g., inflammatory bowel disease, celiac disease) based on clinical features. • Apply the Rome IV diagnostic criteria for diagnosing IBS and recognize red flag symptoms (e.g., weight loss, blood in stools) that may require further investigation beyond IBS. • Interpret basic diagnostic tests (e.g., stool studies, blood tests, imaging if needed) to rule out other gastrointestinal disorders. • Identify the Red flag signs and indications for referral to specialists in complex/severe cases. • Apply evidence-based treatments, including pharmacological agents (e.g., antispasmodics, laxatives, antidiarrheals, probiotics) and non-pharmacological approaches (diet, stress management) and recommend psychosocial interventions such as cognitive-behavioral therapy (CBT) or mindfulness for patients with IBS triggered by stress and anxiety. • Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 										
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	'Ilāj bi'l Tadbīr as an adjuvant therapy for IBS along with contemporary medical sciences.									
CO1, CO3, CO4	<ul style="list-style-type: none"> Define Marad Iltihāb al-Am'ā' (Inflammatory Bowel Disease/IBD), differentiating between Crohn's Disease and Ulcerative Colitis, identify the risk factors, genetic predispositions, and list common symptoms (e.g., diarrhoea, abdominal pain, weight loss, rectal bleeding). Explain the pathophysiology of IBD, focusing on immune dysregulation and gut microbiota changes. Differentiate between the clinical features and anatomical involvement of Crohn's Disease vs. Ulcerative Colitis and recognize the extra-intestinal manifestations of IBD (e.g., arthritis, uveitis, skin lesions). Apply the diagnostic criteria for IBD, including imaging (MRI, CT, endoscopy) and laboratory investigations (CRP, fecal calprotectin, antibody tests). Evaluate the severity of the disease (mild, moderate, severe) based on clinical criteria (e.g., Truelove-Witts criteria for Ulcerative Colitis) and implement evidence-based guidelines for treating IBD, including the use of 5-ASA drugs, corticosteroids, immunosuppressants, biologics, and surgical options. 	CAN	MK	KH	EDU	O-QZ, CL-PR	F&S	1	H-IJ	NLHT34.3

	<ul style="list-style-type: none"> Assess indications for surgery in IBD (e.g., bowel perforation, strictures, unresponsive disease) and referral to specialists in complex/severe cases. Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for IBD along with contemporary medical sciences. 									
CO1, CO3	Explain the Aqsām, Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ishāl (Diarrhoea) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L&PPT, L	QZ, T-OBT	F&S	1	-	LH
CO1	Differentiate between small and large bowel diarrhoea.	CAN	MK	KH	L, L&PPT, L&GD	QZ, T-OBT	F&S	1	-	LH
CO1	Explain aetiology, clinical features, treatment and prevention of Traveller's diarrhoea.	CC	MK	K	L&GD, L, L&PPT	QZ, T-OBT	F&S	1	-	LH
CO1, CO3	Explain the Aqsām, Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Dhūsaṅṭāriyā (Bloody Diarrhoea) as per Unani medicine.	CC	MK	K	L, L&GD, L&PPT	QZ, T-OBT	F&S	1	-	LH
CO1	Differentiate between Dhūsaṅṭāriyā Kabidī and Dhūsaṅṭāriyā Mi'wī as per Unani medicine.	CAN	MK	KH	L&PPT, L&GD, L	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Discuss the causes of chronic blood and mucus in stools and outline the investigations required in such cases, highlighting the significance of stool examination.	CC	MK	K	L&PPT, L&GD, L	T-OBT, QZ	F&S	1	-	LH

CO1	Define Zaḥīr and differentiate between Zaḥīr Kādhīb (Zaḥīr Bātil) and Zaḥīr Ṣādiq.	CK	MK	K	L, L&PPT , L&GD	QZ , T-OBT	F&S	1	-	LH
CO1, CO3	Explain the Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Zaḥīr (Dysentery) as per Unani medicine.	CC	MK	K	L, L&PPT , L&GD	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Discuss the classification, etiology, clinical features, complications, investigations, and management of Nuqs injīdab [Malabsorption syndrome and celiac disease (non-tropical sprue / gluten-induced enteropathy)].	CC	NK	K	L, L&PPT , L&GD	T-OBT, QZ	F&S	1	-	LH
CO1	Describe the chronic effects of diarrhoea including malabsorption.	CC	NK	K	L&GD, L&PPT , L	T-OBT	F&S	1	-	LH
CO1	Discuss Probiotics, prebiotics, and synbiotics and their potential uses in intestinal diseases especially in Malabsorption syndrome and celiac disease.	CC	NK	K	L&GD, L&PPT , L	QZ , T-OBT	F&S	1	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Nuqs injīdab (Malabsorption syndrome and celiac disease) along with contemporary medical sciences.	CAP	NK	KH	L, L&PPT , L&GD	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Define and differentiate between Qūlanj wa Īlā'ūs and Explain the Aqsām, Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Qūlanj wa Īlā'ūs (Large and small Intestinal colic) as per Unani medicine.	CC	MK	K	L, L&GD, L&PPT	T-OBT, QZ	F&S	1	-	LH
CO1, CO3	Explain the, Asbāb, Aqsām, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l	CC	MK	K	L, L&GD, L&PPT	QZ , T-OBT	F&S	1	-	LH

	Tadbīr of Dīdān al-Am'ā' (Intestinal worms) as per Unani medicine.									
CO1	Describe the clinical features, diagnostic methods, and treatment options for common parasitic infections, including enterobiasis (pinworm or threadworm infection), ascariasis (roundworm infection), trichuriasis (whipworm infection), and ancylostomiasis (hookworm disease).	CC	DK	K	L, L&GD, L&PPT	QZ, T-OBT, M-CHT	F&S	1	-	LH
CO1, CO3	Explain the Asbāb, Tashkhīṣ (as per Rome IV diagnostic criteria), Tashkhīṣ Fāriqa, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Qabd (Constipation) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L, L&PPT	QZ, T-OBT	F&S	1	-	LH
CO1, CO3	Explain the, Asbāb, Aqsām, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Bawāsīr (Haemorrhoid) as per Unani medicine.	CC	DK	K	L&PPT, L&GD, L	T-OBT, QZ	F&S	1	-	LH
CO4	Identify the indications for referral to specialists in complex/severe cases.	CAN	MK	KH	L&GD, L, L&PPT	T-CS, QZ	F&S	1	-	LH
CO2, CO3	Perform history-taking and physical examination for patients with suspected intestinal diseases, focusing on abdominal tenderness, bowel sounds, and palpable masses and assessing the severity of dehydration in acute diarrhoeal cases.	PSY-MEC	MK	SH	SIM	Mini-CEX, OSCE	F&S	1	-	NLHP34.1
CO3	Interpret the results of diagnostic tests for intestinal diseases, including colonoscopy, stool tests, imaging (e.g., CT/MRI), and laboratory markers.	CE	MK	SH	W	Log book, Mini-CEX, Portfolios	F&S	1	-	NLHP34.2

CO1	Formulate a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common intestinal diseases considering patient needs, preferences, and available resources.	CS	MK	D	CBL	Portfolios, Log book, PA	F&S	1	-	NLHP34.3
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of diseases of the intestines, ensuring empathy and clarity, educating patients on lifestyle modifications dietary advice, and the importance of follow-up for chronic intestinal diseases to support adherence and optimize outcomes.	AFT-VAL	NK	SH	RP	PA, Log book, Portfolios, OSCE	F&S	1	-	NLHP34.4

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT34.1	Diqq al-Am'ā' (Intestinal tuberculosis)	<p>Game-Based Learning (Duration: 60 minutes)</p> <p>In this session on intestinal tuberculosis, students will engage in an interactive quiz or case-based game focusing on diagnosing and managing the disease. Students will navigate symptoms, diagnostic steps, and treatment decisions in a competitive, collaborative environment using clinical scenarios. This activity will reinforce understanding of pathophysiology, diagnostic criteria, and treatment options while enhancing decision-making skills in a low-stakes, engaging format, ideal for preparing students to manage intestinal tuberculosis in clinical practice. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials on intestinal tuberculosis, including pathophysiology, symptoms, diagnostic methods, and treatment.</p>

		<p>Game Setup: The instructor will introduce a case-based quiz or digital simulation game focused on diagnosing and managing intestinal tuberculosis.</p> <p>Gameplay: Students will individually or in small teams, answer progressive questions or make clinical decisions in a simulated environment, earning points for correct answers and advancing through case scenarios.</p> <p>Feedback and Discussion: After gameplay, the instructor will provide feedback, discuss key points, and clarify misconceptions.</p> <p>Reflection: Students will reflect on learning outcomes and discuss strategies for managing intestinal tuberculosis in real-life settings.</p>
NLHT34.2	<p>Tejhrīk Mi'v'i sīndrom (Irritable Bowel Syndrome)</p>	<p>Project-Based Learning (Duration: 60 minutes)</p> <p>In this activity on IBS, students will work in small groups to research and develop a comprehensive management plan for a hypothetical IBS patient case. This will include investigating the etiology, symptomatology, diagnostic criteria, and various treatment options for IBS, emphasizing lifestyle changes, pharmacological approaches, and patient counseling. Groups will present their findings and proposed management strategies to peers, encouraging collaborative learning, critical thinking, and practical application of knowledge in real-world scenarios relevant to clinical practice. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will be divided into small groups and assigned a project on understanding and managing IBS.</p> <p>Research and Data Collection: Each group will investigate IBS causes, symptoms, diagnostic criteria, and treatment options using provided resources and self-sourced literature.</p>

		<p>Case Study Development: Groups will create a detailed case study based on a hypothetical IBS patient, including history, physical findings, diagnosis, and management.</p> <p>Presentation and Discussion: Groups will present their case study, highlighting diagnostic reasoning and treatment plan, followed by a Q&A session with peers and facilitators.</p> <p>Feedback and Reflection: Facilitators will provide feedback, and students will reflect on their learning experience to reinforce understanding and application of IBS management in clinical practice.</p>
NLHT34.3	<p>Marad Iltihāb al-Am‘ā’ (Inflammatory Bowel Disease/IBD)</p>	<p>Edutainment (Duration: 60 minutes)</p> <p>This approach will enhance engagement, retention, and application of IBD knowledge in a fun, interactive setting. It will help students to reinforce core concepts, build diagnostic reasoning, and to apply their understanding in a memorable way. The steps are as follows:</p> <p>Pre-Activity Preparation: Assign students engaging multimedia content on IBD (such as short videos, animations, and interactive quizzes) to review foundational concepts of IBD, including types, symptoms, and basic management.</p> <p>Role-Play Scenarios: In class, students will participate in role play activities where they will act as patients and healthcare providers discussing symptoms, diagnosis, and treatment options, building communication and diagnostic skills.</p> <p>Group Quiz Games: Organize a quiz game (e.g., Jeopardy or Kahoot) on IBD, covering key concepts, case scenarios, and treatment plans to reinforce learning in a fun, competitive way.</p>

		Reflection and Discussion: End with a group reflection on what they've learned and a brief discussion to clarify any remaining questions, ensuring comprehension and retention.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP34.1	History-Taking and Physical Examination for Intestinal Diseases	<p>Simulation (Duration: 120 minutes)</p> <p>In this simulation-based learning activity, students will practice and refine history-taking and physical examination skills for patients with suspected intestinal disease. This activity will offer a hands-on, interactive learning experience, allowing students to build confidence in patient assessment in a safe, controlled environment. The steps are as follows:</p> <p>Pre- Activity Preparation: Students will review pre-assigned materials (video demonstrations, reading materials, and guidelines) on history-taking and abdominal examination for intestinal diseases.</p> <p>Simulation Setup: In a clinical simulation lab, standardized patients (actors trained to simulate real patients) or manikins will be prepared to present symptoms and signs associated with intestinal diseases.</p> <p>History-Taking: Students, individually or in small groups, will perform history-taking, focusing on symptom onset, frequency, dietary habits, lifestyle factors, and any associated symptoms (e.g., weight loss, pain etc.). They will practice building rapport, asking open-ended questions, and systematically gathering information.</p> <p>Physical Examination: Students will conduct a focused physical examination, including an abdominal examination (focusing on abdominal tenderness, bowel</p>

		<p>sounds, and palpable masses) and assessments of general health, to identify any signs that may correlate with intestinal issues.</p> <p>Instructor Feedback: The facilitator will observe and provide individualized feedback on communication skills, clinical reasoning, and examination techniques, helping students to refine their approach.</p> <p>Group Reflection and Discussion: Students will debrief as a group, discussing common challenges, differential diagnosis, and key takeaways for handling real-life scenarios involving intestinal diseases.</p>
NLHP34.2	<p>Diagnostic tests interpretation for Diseases of the Intestines</p>	<p>Workshops (Duration: 120 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, and practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the intestines.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on various diagnostic tests (e.g. colonoscopy, stool tests, imaging (CT/MRI), and laboratory markers, including indications and result interpretations for diseases of the intestines.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions</p>

		<p>regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for intestinal diseases.</p>
NLHP34.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 60 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common intestinal diseases, focusing on Uṣūl-i-Tashkhīṣ wa Tajwīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice etc.), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p>

		<p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP34.4	<p>Patient Education on Chronic Intestinal Diseases</p>	<p>Role Plays (Duration: 60 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding diseases of the intestines, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on common diseases of the intestines, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the intestines. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a chronic intestinal condition.</p> <p>Role-Playing Session: The healthcare provider will educate patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy.</p>

		(Discuss strategies for improving patient education on lifestyle modifications and follow-up care). Reflection: Students will reflect on their experiences and insights from the activity to enhance future patient interactions.
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Topic 35 امراض کبد Amrād-i-Kabid (Diseases of the Liver) (LH : 8, NLHT: 4, NLHP: 10 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	<ul style="list-style-type: none"> Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waram al-Kabid (Hepatitis) as per Unani medicine. Discuss the etiology, epidemiology, types, pathogenesis, clinical features, investigations, complications, prognosis, prevention, and treatment of viral hepatitis. Explain the etiology, diagnosis, and management of anicteric and delta hepatitis. Discuss the classification, etiology, pathology, clinical features, Investigations, Prognosis, and management of chronic hepatitis. 	CC	MK	K	EDU	O-QZ, CL-PR	F&S	2	-	NLHT35.1
CO1, CO3	<ul style="list-style-type: none"> Describe the Asbāb, Aqsām, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Istisqā' as per Unani medicine. Explain the definition, mechanism, causes, clinical features, investigations (including Ultrasonography, Ascitic fluid examination, 	CC	MK	KH	GBL	O-QZ, Mini-CEX, OSCE	F&S	2	-	NLHT35.2

	<p>Diagnostic paracentesis, Laparoscopy, and peritoneal biopsy), and differential diagnosis of ascites.</p> <ul style="list-style-type: none"> Discuss the pathogenesis and management of ascites and refractory ascites in cirrhosis. 									
CO1, CO3	<ul style="list-style-type: none"> Discuss Fatty Liver Disease (FLD) causes, risk factors, investigations, and management. Differentiate between Non-Alcoholic Fatty Liver Disease (NAFLD) and Alcoholic Fatty Liver Disease (AFLD). Identify key clinical features and laboratory findings of fatty liver disease, including elevated liver enzymes (ALT, AST), ultrasound findings, and histological features (steatosis, inflammation). Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Tashaḥḥum al-Kabid (Fatty Liver Disease / FLD), along with contemporary medical sciences. 	CAN	MK	KH	FC	PM, INT, CBA	F&S	2	-	NLHT35.3
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḍu'f al-Kabid (Hepatic insufficiency) as per Unani medicine.	CC	MK	K	L&GD, L	O-QZ, INT	F&S	2	-	LH
CO1, CO3	Discuss the definition, etiology, pathogenesis, clinical features (including grading of hepatic encephalopathy),	CC	MK	K	L&PPT	T-OBT, QZ, INT	F&S	2	-	LH

	investigations, complications and management of fulminant hepatic failure.									
CO1, CO3	Explain the definition, diagnostic criteria, clinical features, and treatment of subacute hepatic failure.	CC	MK	K	L, L&PPT	INT, QZ, T-OBT	F&S	2	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Suqoot al-Kabid (Hepatic Failure) along with contemporary medical sciences.	CC	MK	K	L&GD, L&PPT	INT, T-CS, T-OBT	F&S	2	-	LH
CO1, CO4	Evaluate when to refer patients to specialist for further management of complicated cases of Hepatic Failure and discuss liver transplantation including indications, contraindications and complications.	CAN	MK	KH	L&GD	INT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Dubayla al-Kabid (Liver abscess) as per Unani medicine.	CC	NK	K	L&PPT	O-QZ, INT, T-OBT	F&S	2	-	LH
CO1, CO3	Discuss the etiology, clinical features, investigations, and management of Liver abscess.	CC	NK	K	L&PPT	T-OBT, T-CS	F&S	2	H-IJ	LH
CO4	Analyze the need for referral for surgical intervention based on the complexity of the case.	CAN	NK	KH	L&GD	INT	F&S	2	-	LH
CO1, CO3	Discuss the etiology, pathogenesis, classification, clinical features, diagnosis (including assessment of the severity of liver disease by The Child-Pugh Score or Child-Turcotte-Pugh Score classification), complications, prognosis, investigations, and treatment of cirrhosis.	CC	MK	K	L&PPT	INT, T-CS, T-OBT	F&S	2	-	LH

CO1, CO3	Differentiate between Laennec's cirrhosis and alcoholic cirrhosis.	CAN	DK	KH	L&GD, L&PPT	QZ , INT	F&S	2	-	LH
CO1, CO3	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Tal'yīf al-Kabid (Cirrhosis of Liver) along with contemporary medical sciences.	CAP	MK	KH	L&GD, L	CBA, INT	F&S	2	-	LH
CO1, CO4	Evaluate when to refer patients to specialist for further management of complicated cases of Hepatic Failure and discuss liver transplantation including indications, contraindications and complications.	CAN	MK	KH	L&GD	INT, O-QZ	F&S	2	-	LH
CO1, CO3	Discuss the etiology, clinical features, investigations, and management of hepatocellular carcinoma (hepatoma).	CC	DK	K	L&PPT	O-QZ, T-OBT	F&S	2	-	LH
CO1, CO3	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Sartān al-Kabid (Hepatic carcinoma) along with contemporary medical sciences.	CC	MK	K	L&GD	T-OBT, INT, T-CS	F&S	2	-	LH
CO4	Analyze the need for referral to the specialists based on the complexity of the case.	CAN	MK	KH	L&GD	INT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, Aqsām, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Yarqān (Jaundice) as per Unani medicine.	CC	MK	K	L&PPT	INT, M-CHT, T-CS	F&S	2	-	LH
CO1, CO3	Discuss the definition, classification, etiology, pathophysiology (including bilirubin metabolism), clinical features, investigations, and management of jaundice.	CC	MK	K	L&PPT , L_VC	T-CS, C-VC	F&S	2	-	LH

CO1, CO3	Differentiate the types of jaundice (haemolytic, hepatocellular, and obstructive/cholestatic) clinically and discuss the differential diagnosis of jaundice of 3 weeks' duration in an elderly person.	CAN	MK	KH	L_VC	T-CS, INT, C-VC	F&S	2	-	LH
CO3	Illustrate Wujūh-i-Istedlal-i-Amrāḍ-i-Kabid and its role in the diagnosis of Amrāḍ-i-Kabid (Diseases of the Liver) as per Unani medicine.	CAN	MK	KH	TBL	Log book, Portfolios, PA, CHK	F&S	2	-	NLHP35.1
CO2, CO3	Conduct a detailed history-taking and physical examination in patients with suspected liver disease, focusing on identifying jaundice, ascites, hepatomegaly, and other relevant signs.	PSY-MEC	MK	SH	RP	DOAP, OSCE, Mini-CEX	F&S	2	-	NLHP35.2
CO3	Interpret the results of diagnostic tests for diseases of the liver (e.g., liver function tests, ultrasound, CT/MRI, and liver biopsy) with relevant indications and contraindications.	CE	MK	SH	W	INT, Mini-CEX, Log book	F&S	2	-	NLHP35.3
CO1	Develop a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common diseases of the liver considering disease stage, patient needs, preferences, and healthcare resources.	CS	MK	D	CBL	Portfolios, Log book, PA	F&S	2	-	NLHP35.4
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of diseases of the liver, ensuring empathy and clarity, and educate patients on preventive measures, lifestyle modifications, and the importance of follow-up for managing chronic liver diseases and preventing complications.	AFT-VAL	NK	SH	RP	OSCE, PA, Portfolios, Log book	F&S	2	-	NLHP35.5

CO1, CO4	Build competency in essential procedural skills relevant to managing liver diseases such as Paracentesis (Ascitic Fluid Aspiration), and Liver Abscess Aspiration.	PSY-GUD	DK	SH	SIM	PA, DOPS, OSPE, DOPS	F&S	2	-	NLHP35.6
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT35.1	Waram al-Kabid (Hepatitis)	<p>Edutainment (Duration: 90 minutes)</p> <p>This edutainment-based session on Waram al-Kabid (Hepatitis) blends education with engaging activities to enhance understanding and retention. Students will explore Waram al-Kabid (Hepatitis) through interactive media, such as animated videos, quizzes, role-playing scenarios, and case-based games, designed to illustrate the causes, pathophysiology, symptoms, diagnosis, and management of hepatitis in an enjoyable format. By actively participating in these activities, students can deepen their understanding of disease in a memorable way, while fostering teamwork, clinical reasoning, and problem-solving skills. This approach will support an engaging, student-centered learning experience, enhancing their preparedness for clinical practice.</p>
NLHT35.2	Istisqā': Ascites Adventure - Game-Based Diagnosis and Management	<p>Game-Based Learning (Duration: 60 minutes)</p> <p>This interactive game-based learning activity will engage students in understanding the diagnosis and management of ascites. Students will work in teams to solve patient case scenarios in a virtual or board-game format, navigating through different stages of patient care—history-taking, examination, diagnosis, and treatment planning. Each stage presents challenges or "levels" where teams must make critical decisions to advance. This gamified approach will enhance their clinical reasoning, decision-making skills, and collaborative learning in managing ascites effectively.</p>

NLHT35.3	Tashahum al-Kabid (Fatty Liver Disease / FLD)	<p>Flipped Classroom (Duration: 90 minutes)</p> <p>In this session, students will receive pre-session resources, including articles, short videos, and case studies on fatty liver disease. Before the class, they are expected to review these materials to gain foundational knowledge. During the class session, students will engage in group discussions, problem-solving exercises, and case-based analysis to deepen their understanding. Faculty will facilitate interactive Q&A and clarify complex concepts, focusing on pathophysiology, diagnosis, and management of fatty liver. This approach promotes active learning and critical thinking, reinforcing clinical application in real-world scenarios.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP35.1	Unani diagnostic methods for Amrāḍ-i-Kabid (Diseases of the liver)	<p>Team-Based Learning (Duration: 120 minutes)</p> <p>This method will enhance collaborative learning, critical thinking, and diagnostic accuracy by integrating peer input and faculty guidance, equipping students with essential teamwork skills for clinical practice. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned materials of classical Unani texts on Wujūh-i-Istedlal-i-Amrāḍ-i-Kabid and Tareeqa-i-Tashkhīṣ (diagnostic criteria) for Amrāḍ-i-Kabid (common liver diseases).</p> <p>Individual Readiness Assurance Test: Each student will complete a short quiz individually to assess baseline understanding of the Unani diagnostic methods.</p> <p>Team Readiness Assurance Test: Students will form teams, discuss the quiz, and retake it together to solidify knowledge and encourage peer learning.</p>

		<p>Application Exercise: Teams will receive clinical case scenarios and collaboratively diagnose the common diseases of the liver based on clinical features as per Unani medicine, refining diagnostic reasoning skills.</p> <p>Facilitated Discussion: Faculty will lead a discussion, reviewing answers and clarifying complex concepts.</p> <p>Reflection: Students will complete a self-assessment on diagnosing liver diseases based on Unani diagnostic methods, reinforcing critical thinking and diagnostic skills.</p>
NLHP35.2	<p>History-Taking and Examination for Diseases of the Liver</p>	<p>Role Plays (Duration: 120 minutes)</p> <p>This method combines observational learning and supervised practice to build clinical competency in examining patients with symptoms of diseases of the liver. The steps are as follows.</p> <p>Pre-Activity Preparation: Students will watch a demonstration video and read guidelines on examination techniques and history-taking for liver-related symptoms.</p> <p>Hands-On Practice (Role Play): In pairs, students will practice history-taking and physical examination on each other or simulated patients, focusing on identifying jaundice, ascites, hepatomegaly, and other relevant signs.</p> <p>Faculty Supervision and Feedback: The instructor will observe and provide real-time feedback, correcting techniques and guiding students on interpreting findings.</p> <p>Reflection and Self-Assessment: Students will complete a checklist to self-assess their skills and identify areas for improvement.</p>

NLHP35.3	Diagnostic Tests Interpretation for Diseases of the Liver	<p>Workshops (Duration: 120 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the liver.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests including liver function tests, ultrasound, CT/MRI, and liver biopsy, etc., with relevant indications and interpretation of the results for diseases of the liver.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for diseases of the liver.</p>
NLHP35.4	Nuskha Navesī	<p>Case-Based Learning (Duration: 120 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will</p>

		<p>individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common diseases of the liver, focusing on Uṣūl-i-Tashkhīṣ wa Tajwīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP35.5	Patient Education on Diseases of the Liver	<p>Role Plays (Duration: 60 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding diseases of the liver, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on</p>

		<p>common diseases of the liver, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the liver. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a liver disease.</p> <p>Role-Playing Session: The healthcare provider will educate the patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions</p>
NLHP35.6	Building Competency in Procedures of Diseases of the Liver	<p>Simulation (Duration: 60 minutes)</p> <p>This approach will build hands-on competency in a safe, supervised environment. The steps are as follows:</p>

		<p>Demonstration: The faculty will demonstrate Paracentesis (Ascitic Fluid Aspiration), and Liver Abscess Aspiration on a mannequin, explaining each step and safety considerations.</p> <p>Hands-On Practice: Students will practice the procedures on mannequins under faculty supervision, focusing on correct technique and patient comfort.</p> <p>Peer Observation: Students will observe peers performing the procedure and provide constructive feedback based on a checklist.</p> <p>Feedback & Reflection: Faculty will provide personalized feedback to each student, followed by a brief group discussion on challenges and best practices.</p> <p>Competency Assessment: Students will complete a checklist-based skills assessment to ensure proficiency and safety in performing these essential procedures.</p>
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Topic 36 امراض کلیہ Amrād-i-kulya (Diseases of the Kidney) (LH : 7, NLHT: 3, NLHP: 10 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3, CO4	<ul style="list-style-type: none"> Discuss the definition, RIFLE criteria to classify the severity of AKI, Acute Kidney Injury Network (AKIN) classification, aetiopathogenesis, clinical features (including changes in urine output, fluid overload, and electrolyte imbalances), complications, and investigations of acute renal failure/acute kidney injury. Apply clinical guidelines (e.g. KDIGO) for assessing and managing patients with ARF, considering both underlying causes (e.g. fluid resuscitation for pre-renal causes or 	CAN	MK	KH	TBL	Portfolios, PA, CHK, Log book	F&S	2	-	NLHT36.1

	<p>discontinuation of nephrotoxic medications) and supportive care.</p> <ul style="list-style-type: none"> Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for ARF/AKI along with contemporary medical sciences. Evaluate when to refer patients to a nephrologist for further management of complicated cases of ARF or when considering renal replacement therapy. 									
CO1, CO3, CO4	<ul style="list-style-type: none"> Discuss the definition, etiology, risk factors, and pathophysiology (including the role of glomerular filtration rate /GFR decline and the consequences of nephron loss) of chronic renal failure/ chronic kidney disease (CKD). Describe the stages of CKD according to the KDIGO guidelines and explain its key clinical features (e.g. changes in urine output, fatigue, oedema, and metabolic derangements), potential complications, (including anemia, bone mineral disorders, and cardiovascular risks), investigations, diagnosis and management (DASH diet, water restriction) of chronic renal failure (CRF). Discuss the renal replacement therapies including Dialysis (Haemodialysis and Peritoneal dialysis), Ultrafiltration, Haemofiltration, 	CAN	MK	KH	BL	Portfolios, Log book, CHK, PA, O- QZ	F&S	2	-	NLHT36.2

	<p>Haemodiafiltration, and Continuous renal replacement therapies along with their indications.</p> <ul style="list-style-type: none"> Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for CRF/CKD along with contemporary medical sciences. Evaluate when to refer patients to a nephrologist for further management of complicated cases of CKD or when considering renal replacement therapy or renal transplantation. 									
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Du'f -i-Kulya wa Huzāl al-Kulya (Renal Insufficiency/ debility and Renal atrophy) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L&PPT, L	O-QZ, INT, T-OBT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waja' al-Kulya (Renal pain) as per Unani and contemporary medical sciences.	CC	MK	K	L, L&GD, L&PPT	O-QZ, INT, T-OBT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waram al-Kulya (Nephritis) as per Unani and contemporary medical sciences.	CC	DK	K	L, L&GD, L&PPT	QZ, T-CS, T-OBT	F&S	2	-	LH
CO4	Analyze the need for referral to a nephrologist based on the complexity of the case.	CAN	NK	KH	L&GD	INT	F&S	2	-	LH

CO1, CO3	Describe the Asbāb, Aqsām, 'Alāmāt, Tashkhīṣ, Tashkhīṣ Fāriqa of Ḥaṣā wa Raml al-Kulya (Renal calculus and concretions /Renal stones) as per Unani and contemporary medical sciences.	CC	MK	K	L&PPT , L	INT, O-QZ	F&S	2	-	LH
CO1, CO4	Analyze the need for referral for surgical intervention based on the complexity of the case and develop an appropriate management strategies (Uṣūl-i-'Ilāj wa 'Ilāj) based on stone size and type for renal calculi including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as per Unani and contemporary medical sciences.	CAN	MK	KH	L&PPT , L&GD	INT, O-QZ	F&S	2	-	LH
CO1, CO3	Explain the causes, types, clinical features, investigations, and treatment of renal tuberculosis.	CC	DK	K	L&PPT , L	O-QZ, INT	F&S	2	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Diqq al-Kulya (Renal tuberculosis) along with contemporary medical sciences.	CC	DK	K	L&GD, L&PPT	INT, O-QZ, T-OBT	F&S	2	-	LH
CO4	Analyze the need for referral for surgical intervention based on the complexity of the case.	CAN	NK	KH	L&GD	INT	F&S	2	H-IJ	LH
CO1, CO3	Discuss the aetiology, pathogenesis, clinical features, complications, diagnosis and management of Nyfraytīk sīndrom wa Nyfrītīk sīndrom (Nephritic syndrome and Nephrotic syndrome).	CC	NK	K	L&PPT	T-OBT	F&S	2	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Nyfraytīk sīndrom wa Nyfrītīk sīndrom	CC	NK	K	L&PPT	T-OBT, INT	F&S	2	-	LH

	(Nephritic syndrome and Nephrotic syndrome) along with contemporary medical sciences.									
CO4	Analyze the need for referral for surgical intervention based on the complexity of the case.	CAN	NK	KH	L&GD	INT	F&S	2	-	LH
CO2, CO3	Conduct a detailed history-taking and physical examination of a patient with suspected renal disease, focusing on signs such as edema, blood pressure changes, and flank pain.	PSY-MEC	MK	SH	RP	DOAP, OSCE, Mini- CEX	F&S	2	-	NLHP36.1
CO3	Interpret the results of diagnostic tests for diseases of the kidney including laboratory tests (e.g., serum creatinine, blood urea nitrogen, electrolyte levels, estimated GFR, urinalysis), imaging studies (e.g., ultrasound, CT), Renal biopsy, Creatine clearance rate, with relevant indications and results.	CE	MK	SH	W	INT, Log book, Mini- CEX	F&S	2	-	NLHP36.2
CO1	Develop a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common diseases of the kidney considering patient needs, preferences, and available resources.	CS	MK	D	CBL	Portfolios, Log book, PA	F&S	2	-	NLHP36.3
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of diseases of the kidney, ensuring empathy and clarity and counsel patients on preventive care, dietary modifications, fluid intake, and the importance of adherence to treatment and follow-up in managing chronic kidney disease.	AFT-VAL	NK	SH	RP	OSCE, Portfolios, PA, Log book	F&S	2	-	NLHP36.4

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
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NLHT36.1	Suqoot al-Kulya (Renal Failure): Acute Renal Failure / Acute Kidney Injury	<p>Team-Based Learning (Duration: 90 minutes)</p> <p>In this activity, students will engage in a Team-Based Learning (TBL) session focusing on the pathophysiology, diagnosis, and management of acute renal failure (acute kidney injury). Students will begin with a pre-class individual readiness assessment to review foundational concepts. During the session, they will participate in team-based problem-solving activities, including analyzing clinical cases, identifying risk factors, and designing treatment plans. Each team will discuss their approaches and defend their decisions in front of the class, fostering peer learning and critical thinking.</p>
NLHT36.2	Suqoot al-Kulya (Renal Failure): Chronic Renal Failure / Chronic Kidney Disease	<p>Blended Learning (Duration: 90 minutes)</p> <p>In this activity, students will engage in a case-based analysis of chronic kidney disease (CKD) in a flipped classroom setup. Before the session, students will review multimedia resources and assigned readings on CKD etiology, pathophysiology, and treatment approaches. During the session, small groups will discuss real-life cases, analyze clinical data, and propose management plans. Faculty will facilitate discussions, providing guidance and immediate feedback to deepen understanding. This active learning approach helps students apply theoretical knowledge to clinical practice, improving diagnostic and management skills for CKD.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP36.1	History-Taking and Examination for Diseases of the Kidney	Role Plays (Duration: 150 minutes)

		<p>This method combines observational learning and supervised practice to build clinical competency in examining patients with symptoms of diseases of the kidney. The steps are as follows.</p> <p>Pre-Activity Preparation: Students will watch a demonstration video and read guidelines on examination techniques and history-taking for kidney-related symptoms.</p> <p>Hands-On Practice (Role Play): In pairs, students will practice history-taking and physical examination on each other or simulated patients, focusing on identifying edema, blood pressure changes, flank pain, and relevant findings.</p> <p>Faculty Supervision and Feedback: The instructor will observe and provide real-time feedback, correcting techniques and guiding students on interpreting findings.</p> <p>Reflection and Self-Assessment: Students will complete a checklist to self-assess their skills and identify areas for improvement.</p>
NLHP36.2	Diagnostic tests Interpretation for Diseases of the Kidney	<p>Workshops (Duration: 150 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the kidney.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests including laboratory tests (e.g., serum creatinine, blood urea nitrogen, electrolyte levels, estimated GFR, urinalysis), imaging studies (e.g., Ultrasound, CT), Renal biopsy, Creatine</p>

		<p>clearance rate, including indications and result interpretations for diseases of the kidney.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for diseases of the kidney.</p>
NLHP36.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 150 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common diseases of the kidney, focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p>

		<p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP36.4	Patient Education on Diseases of the kidney	<p>Role Play (Duration: 150 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding diseases of the kidney, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on common diseases of the kidney, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the kidney. (Develop specific challenges related to communication and patient education).</p>

		<p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a renal condition.</p> <p>Role-Playing Session: The healthcare provider will educate the patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions</p>
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Topic 37 امراض مثانه Amrāḍ-i-Mathāna (Diseases of the Bladder) (LH : 3, NLHT: 2, NLHP: 3 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	<ul style="list-style-type: none"> Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḥurqa al-Bawl/ Ta'dia al-Majārī-i-Bawl (Urinary Tract Infection / UTI) as per Unani and contemporary medical sciences. Assess the need for referrals to specialists, such as urologists, based on the complexity of the cases of Ḥurqa al-Bawl/ Ta'dia al-Majārī-i-Bawl (Urinary Tract Infection / UTI). 	CAN	MK	KH	CBL	Log book, Portfolios, PA	F&S	2	-	NLHT37.1

CO1, CO3	<ul style="list-style-type: none"> Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Bawl al-Dam (Haematuria) as per Unani and contemporary medical sciences. Apply clinical guidelines for the workup of haematuria, including when to refer patients for specialist evaluation. 	CAP	MK	KH	FC	O-QZ, CL-PR	F&S	2	-	NLHT37.2
CO1, CO3, CO4	<ul style="list-style-type: none"> Differentiate between Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD) as per Unani medicine. Explain Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Salas al-Bawl wa Taqtīr al-Bawl as per Unani and contemporary medical sciences. Assess the need for referral to specialists, such as urologists, based on the complexity of the cases of Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD). 	CAN	MK	KH	BS	DEB, CL-PR	F&S	2	-	NLHT37.3
CO1, CO3, CO4	<ul style="list-style-type: none"> Explain Asbāb, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Kathra al-Bawl wa Qilla al-Bawl (Polyuria and Oliguria) as per Unani and contemporary medical sciences. 	CAN	MK	KH	IBL	QZ, M-CHT, O-QZ	F&S	2	-	NLHT37.4

	<ul style="list-style-type: none"> Assess the need for referral to specialists, such as urologists, based on the complexity of the cases of Kathra al-Bawl wa Qilla al-Bawl (Polyuria and Oliguria). 									
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waram al-Mathāna (Cystitis) as per Unani and contemporary medical sciences.	CC	MK	K	L&PPT , L, L&GD	QZ , T-CS	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, Aqṣām, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḥaṣā wa ramal al-Mathāna (Vesicolithiasis) as per Unani and contemporary medical sciences.	CC	MK	K	L&PPT , L, L&GD	O-QZ, T-CS	F&S	2	-	LH
CO4	Analyse the need for referral to specialists, such as urologists, based on the complexity of the case of Ḥaṣā wa ramal al-Mathāna (Vesicolithiasis).	CAN	MK	KH	L&GD, L&PPT , L	DEB, QZ	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Iḥtibās al-Bawl (Urinary Retention) as per Unani and contemporary medical sciences.	CC	MK	K	L&GD, L&PPT , L	DEB, CL-PR, O-QZ	F&S	2	-	LH
CO4	Analyse the need for referral to specialists, such as urologists, based on the complexity of the case of Iḥtibās al-Bawl (Urinary Retention).	CAN	MK	KH	L	DEB, QZ	F&S	2	-	LH
CO2, CO3	Conduct history-taking and demonstrate the correct technique for examining the lower abdomen for patients presenting with bladder-related symptoms, focusing on signs like bladder distension, tenderness in the suprapubic	PSY-MEC	MK	SH	RP	Mini-CEX, OSCE, DOAP	F&S	2	-	NLHP37.1

	region and symptoms such as dysuria, urgency, and frequency.									
CO3	Interpret the results of diagnostic tests for diseases of the bladder including urinalysis, urine culture, cystoscopy, and imaging studies like ultrasound and CT scans with relevant indications and results.	CE	MK	SH	W	Log book, Portfolios, Mini-CEX	F&S	2	-	NLHP37.2
CO1	Formulate a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common diseases of the bladder considering patient needs, preferences, and available resources.	CS	MK	D	CBL	PA, Portfolios, Log book	F&S	2	-	NLHP37.3
CO5, CO6	Communicate effectively with patients and caregivers regarding the diagnosis, treatment options, and prognosis of diseases of the bladder, ensuring empathy and clarity and educating patients on lifestyle modifications, fluid management, and preventive care to maintain bladder health and reduce the recurrence of bladder infections.	AFT-VAL	NK	SH	RP	PA, Portfolios, OSCE, Log book	F&S	2	-	NLHP37.4
CO1, CO4	Demonstrate essential procedural skills relevant to the management of bladder diseases such as Urethral catheterization and Suprapubic puncture.	PSY-GUD	DK	SH	SIM	PA, DOPS, DOPS, OSPE	F&S	2	-	NLHP37.5

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT37.1	Ḥurqa al-Bawl/ Ta'dia al-Majāri-i-Bawl (Urinary Tract Infection / UTI)	<p>Case-Based Learning (Duration: 30 minutes)</p> <p>This approach will foster critical thinking, clinical reasoning, teamwork, and the practical application of theoretical knowledge in real-world situations. Through this</p>

		<p>activity, students will individually reflect on adapting management strategies to diverse patient scenarios and available resources. This method enhances their ability to diagnose and manage UTIs by integrating clinical reasoning with theoretical understanding. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials on UTI, including key aspects like etiology, pathophysiology, symptoms, risk factors, and treatment options.</p> <p>Case Distribution: In small groups, students will receive a clinical case of a UTI patient, including patient history, symptoms, and preliminary lab results.</p> <p>Discussion & Analysis: Groups will discuss the case, identifying diagnostic steps, differential diagnosis, and initial treatment options.</p> <p>Group Presentation: Each group will present its case analysis and management plan, followed by feedback and discussion with peers and facilitators.</p> <p>Debrief & Reflection: The facilitator will summarize key takeaways, reinforcing correct approaches to UTI diagnosis and management, and students will reflect on learning points.</p>
NLHT37.2	Bawl al-Dam (Haematuria)	<p>Flipped Classroom (Duration: 30 minutes)</p> <p>In this activity, students will independently review pre-assigned materials on Bawl al-Dam (Haematuria), including video lectures, reading materials, and case studies before the scheduled class. These resources will cover the etiology, pathophysiology, clinical presentation, diagnosis, and management of the disease. During the in-class session, students will engage in interactive activities, including case discussions, group problem-solving, and Q&A sessions with facilitators to reinforce understanding and clarify complex concepts. This approach promotes</p>

		active learning, critical thinking, and application of theoretical knowledge, preparing students to effectively recognize, diagnose, and manage haematuria in clinical settings.
NLHT37.3	Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD)	<p>Brainstorming (Duration: 30 minutes)</p> <p>In this session, students will collaborate in small groups to explore key aspects of the Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD) through guided discussion and idea generation. Before the session, students will be assigned foundational reading materials covering the etiology, risk factors, clinical presentation, diagnosis, and management of Salas al-Bawl wa Taqtīr al-Bawl. During the brainstorming activity, each group will identify and discuss various dimensions of the disease, including its causes, treatment options, and preventive measures. The facilitator will encourage students to share their insights, pose questions, and challenge each other's ideas to foster critical thinking and deepen their understanding. The collaborative nature of this activity promotes active engagement, enhances knowledge retention, and prepares students for real-world clinical scenarios involving Salas al-Bawl wa Taqtīr al-Bawl.</p>
NLHT37.4	Kathra al-Bawl wa Qilla al-Bawl (Polyuria and Oliguria)	<p>Inquiry-Based Learning (Duration: 30 minutes)</p> <p>In this session on Kathra al-Bawl and Qilla al-Bawl (Polyuria & Oliguria), students will explore the condition through guided investigation and problem-solving. Before class, students will review foundational materials on the causes, pathophysiology, and clinical presentation of Kathra al-Bawl and Qilla al-Bawl. During the session, students will be presented with a clinical scenario involving a patient with Kathra al-Bawl and Qilla al-Bawl and work in small groups to formulate diagnostic hypothesis, identify relevant tests, and propose initial management steps. The facilitators will guide students with probing questions to encourage deeper analysis and clinical reasoning. This activity fosters critical thinking, teamwork, and hands-</p>

		on problem-solving, equipping students to approach cases systematically and with clinical confidence.
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP37.1	History-Taking and Examination for Diseases of the Urinary bladder	<p>Role Plays (Duration: 60 minutes)</p> <p>This method combines observational learning and supervised practice to build clinical competency in examining patients with symptoms of diseases of the bladder. The steps are as follows.</p> <p>Pre-Activity Preparation: Students will watch a demonstration video and read guidelines on lower abdominal examination techniques and history-taking for bladder-related symptoms.</p> <p>Hands-On Practice (Role Play): In pairs, students will practice history-taking and lower abdominal examination on each other or simulated patients, focusing on identifying bladder distension, tenderness in the suprapubic region, and relevant findings.</p> <p>Faculty Supervision and Feedback: Instructor will observe and provide real-time feedback, correcting technique and guiding students on interpreting findings.</p> <p>Reflection and Self-Assessment: Students will complete a checklist to self-assess their skills and identify areas for improvement.</p>
NLHP37.2	Diagnostic tests interpretation for Diseases of the Urinary bladder	Workshops (Duration: 30 minutes)

		<p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the bladder.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests including urinalysis, urine culture, cystoscopy, and imaging studies like ultrasound and CT scans, including indications and result interpretations for diseases of the bladder.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for diseases of the bladder.</p>
NLHP37.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 30 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will</p>

		<p>individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common diseases of the bladder, focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP37.4	Patient Education on Diseases of the Urinary bladder	<p>Role Plays (Duration: 30 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding diseases of the bladder, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on</p>

		<p>common diseases of the bladder, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of diseases of the bladder. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a bladder condition.</p> <p>Role-Playing Session: The healthcare provider will educate the patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions</p>
NLHP37.5	Procedures relevant to Diseases of the Urinary Bladder	<p>Simulation (Duration: 30 minutes)</p> <p>This approach will build hands-on competency in a safe, supervised environment. The steps are as follows:</p>

		<p>Demonstration: The faculty will demonstrate Urethral catheterization and Suprapubic puncture on a mannequin, explaining each step and safety considerations.</p> <p>Hands-On Practice: Students will practice the procedures on mannequins under faculty supervision, focusing on correct technique and patient comfort.</p> <p>Peer Observation: Students will observe peers performing the procedure and provide constructive feedback based on a checklist.</p> <p>Feedback & Reflection: Faculty will provide personalized feedback to each student, followed by a brief group discussion on challenges and best practices.</p> <p>Competency Assessment: Students will complete a checklist-based skills assessment to ensure proficiency and safety in performing these essential procedures.</p>
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Topic 38 امراض اعضاء تناسلية مردانه Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders) (LH : 6, NLHT: 3, NLHP: 6 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3, CO4	<ul style="list-style-type: none"> Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḍu'f al-Bāh (sexual debility) as per Unani medicine. Enlist the risk factors, potential causes, and common comorbidities associated with sexual debility and describe the psychological factors contributing to it including anxiety, depression, and relationship issues. Describe Ḍu'f al-Bāh ba sabab Qilla al-Manvīya (Oligospermia) and define key terms related to 	CAN	MK	KH	GBL	PA, Log book, CHK, INT, Portfolios	F&S	2	-	NLHT38.1

	<p>sperm morphology, such as Qilla al- Huwainiyat al-Manvīya (oligozoospermia), asthenozoospermia, teratozoospermia, and spermatogenesis.</p> <ul style="list-style-type: none"> • Enlist common causes and risk factors associated with abnormal sperm types, including genetic factors, lifestyle choices, and medical conditions (e.g., varicocele, infections, endocrine disorders, etc.). • Explain the pathophysiology of oligospermia, including the role of testicular function, hormone levels, and environmental factors. • Explain the normal structure and function of sperm, including the role of the head, midpiece, and tail in fertility. Describe how abnormalities in sperm morphology and motility can impact fertility and the overall implications for male reproductive health. • Implement evidence-based management strategies for patients with abnormal sperm findings, including lifestyle modifications and assisted reproductive technologies (ART) when necessary, and compare the benefits and limitations of different assisted reproductive techniques (e.g., IVF, ICSI) in cases of abnormal sperm morphology. • Analyze the need for referral to specialists based on the complexity of the case of Ḍu'f al-Bāh (sexual debility). 									
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CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Sur'a al-Inzāl (Premature ejaculation) as per Unani medicine.	CC	MK	K	L&GD, L, L&PPT	CL-PR, INT, QZ	F&S	2	-	LH
CO1	<ul style="list-style-type: none"> Identify key symptoms of premature ejaculation, such as the inability to delay ejaculation during sexual intercourse and the distress it causes to the individual and/or partner. Explain the anatomy and physiology of male sexual function, focusing on ejaculation mechanisms and the role of neurotransmitters. 	CC	MK	K	L&GD, L&PPT	INT, O-QZ	F&S	2	-	LH
CO1, CO3	<ul style="list-style-type: none"> Apply clinical guidelines for the assessment and management of premature ejaculation, including appropriate diagnostic tools and questionnaires (e.g., Premature Ejaculation Diagnostic Tool (PEDT). Implement appropriate management strategies for premature ejaculation, including pharmacological treatments (e.g., SSRIs, topical anesthetics) and behavioral therapies (e.g., the squeeze technique) as per the contemporary system of medicine. 	CAP	MK	KH	L&GD, L&PPT	INT, O-QZ, T-OBT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Kathra al-Ihtilām (Excessive Nocturnal Emission) as per Unani medicine.	CC	MK	K	L, L&PPT, L&GD	INT, T-CS, O-QZ, T-OBT	F&S	2	-	LH

CO1	Explain the physiology of nocturnal emissions, including the role of the male reproductive system during sleep, and understand the normalcy of nocturnal emissions in various developmental stages and cultural contexts.	CC	MK	K	L&GD, L, L&PPT	INT, T-OBT, O-QZ	F&S	2	-	LH
CO1	Implement appropriate management strategies for excessive nocturnal emissions, including lifestyle changes, counselling, and pharmacological treatments when necessary.	CAP	MK	KH	L, L&PPT, L&GD	INT, T-OBT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Sailan Manī wa Mazī (Spermatorrhea and Pre-ejaculate) as per Unani and contemporary system of medicine.	CC	DK	K	L&GD, L&PPT, L	INT, O-QZ, T-OBT	F&S	2	-	LH
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Nuqse Na'ūd (Erectile dysfunction) as per Unani and contemporary system of medicine.	CC	MK	K	L&GD, L&PPT, L	INT, T-OBT, O-QZ	F&S	2	-	LH
CO1, CO3	Explain the physiological mechanisms involved in achieving and maintaining an erection, including the role of hormones, blood flow, and nerve signalling.	CC	MK	K	L&GD, L, L&PPT	O-QZ, T-OBT, INT	F&S	2	-	LH
CO1	Describe the psychological factors contributing to ED, including anxiety, depression, and relationship issues.	CC	MK	K	L&GD, L	O-QZ, INT	F&S	2	-	LH
CO2, CO3	Elicit a comprehensive sexual health and reproductive history from patients (including questions about symptoms, lifestyle factors, and psychosocial issues relevant to male sexual and reproductive disorders) and conduct a focused	PSY-MEC	MK	SH	GBL	CHK, OSCE, O-QZ, Mini-CEX	F&S	2	-	NLHP38.1

	physical examination pertinent to male sexual health, assessing for signs such as testicular atrophy, varicocele, penile abnormalities, and signs of endocrine dysfunction.									
CO3	Interpret relevant diagnostic tests, including semen analysis, hormonal assays (testosterone, LH, FSH, prolactin), penile Doppler studies, and ultrasound imaging for diagnosing male sexual and reproductive disorders based on clinical findings and patient history.	CE	MK	SH	W	INT, Log book, Mini-CEX	F&S	2	-	NLHP38.2
CO1	Formulate a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for male genital disorders considering patient needs, preferences, and available resources.	CS	MK	D	CBL	Portfolios, Log book, PA	F&S	2	-	NLHP38.3
CO5, CO6	<ul style="list-style-type: none"> Demonstrate effective communication skills to address psychosocial aspects related to sexual health, including psychological impacts, stigma, and patient anxieties, ensuring empathy and clarity and educate patients on lifestyle modifications and preventive measures to support sexual and reproductive health, addressing factors such as diet, exercise, smoking cessation, and stress management. Assess the need for referrals to mental health professionals for specialized sexual therapy or urologists based on the complexity of the case. 	AFT-VAL	NK	SH	RP	PA, Portfolios, Log book, OSCE	F&S	2	-	NLHP38.4
Non Lecture Hour Theory										

S.No	Name	Description of Theory Activity
NLHT38.1	Du'f al-Bāh (sexual debility) - Fertility Quest: Unani Perspectives on Male Infertility	<p>Game-Based Learning (Duration: 180 minutes)</p> <p>In this activity, students will participate in an interactive case-solving game focused on sexual debility, oligospermia, oligozoospermia, and male infertility. Divided into teams, students will receive case scenarios with symptoms, lab findings, and lifestyle factors related to male infertility. Each team will discuss and propose Unani-based diagnoses and treatment strategies, earning points for accurate responses and justifications. The team with the highest points wins, promoting active engagement and reinforcing learning on the pathophysiology, diagnosis, and treatment of these conditions within Unani medicine.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP38.1	History-Taking and Examination for Male Genital Disorders	<p>Case-Based Learning (Duration: 120 minutes)</p> <p>This game-based approach will enhance engagement, reinforce key clinical skills, and build diagnostic confidence in a structured, interactive format.</p> <p>Game Scenario: Set up a virtual or physical scenario where students will be "clinicians" in a mock clinic. Provide brief guidelines on history-taking and examination objectives for male genital disorders.</p> <p>Divide Students into Teams: Divide the class into small teams of 3-4 students. Each team will take turns in acting as the "clinician," while others observe and take notes for feedback.</p> <p>Game Setup (Role-play and Case Cards): Give each team a case card with a patient scenario, including symptoms, age, and relevant history clues. One team</p>

		<p>member will role play as the patient with a specific disorder, and the clinician team will perform history-taking.</p> <p>Guided Questions and Clues: During history-taking, the instructor will provide clues based on questions asked to guide students toward critical diagnostic points. Teams will earn points for correctly identifying key history elements, symptoms, and appropriate examination steps.</p> <p>Interactive Physical Exam Simulation: Teams will perform basic physical exams relevant to the case using models or simulations. The instructor or facilitator will provide feedback and score points based on accuracy and technique.</p> <p>Debrief and Reflection: After the role-play, each team will reflect on their approach, discussing missed or correctly identified elements. The instructor will offer constructive feedback, reinforcing learning points and clinical reasoning skills.</p> <p>Scoring and Peer Feedback: Teams will earn points based on accuracy, thoroughness, and patient interaction skills. The session will be concluded with peer and instructor feedback to solidify learning outcomes.</p>
NLHP38.2	Diagnostic Tests Interpretation for Male Genital Disorders	<p>Workshops (Duration: 60 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for male genital disorders.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests including semen analysis, hormonal assays (testosterone, LH, FSH, prolactin), penile Doppler studies, and ultrasound imaging for diagnosing male sexual and reproductive disorders.</p>

		<p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for male genital disorders.</p>
NLHP38.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 120 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on male genital disorders, focusing on Uṣūl-i-Tashkhīṣ wa Tajwīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p>

		<p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-‘Ilāj wa ‘Ilāj including ‘Ilāj bi’l Taghdhiya, ‘Ilāj bi’l Dawā’ and ‘Ilāj bi’l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP38.4	<p>Patient Education on Male Genital Disorders</p>	<p>Role Plays (Duration: 60 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding male genital disorders, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on male genital disorders including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of the diseases. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with any male genital disorder (e.g. Ḍu’f al-Bāh, Sur’a al-Inzāl, or Kathra al-Iḥtilām etc.).</p>

		<p>Role-Playing Session: The healthcare provider will educate the patients on recommended lifestyle changes and dietary modifications while discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights from the activity to enhance future patient interactions.</p>
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Topic 39 امراض متعدية Amrāḍ-i-Muta'di (Infectious Diseases) (LH : 14, NLHT: 6, NLHP: 16 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3, CO5	<ul style="list-style-type: none"> Explain the types of influenza viruses, including subtypes associated with avian (bird flu) and swine (swine flu) influenza, and discuss their modes of transmission, risk factors, and global epidemiology. Describe the pathophysiological mechanisms of influenza virus infection, and recognize the common clinical symptoms and complications associated with seasonal, avian, and swine influenza. Identify the diagnostic tools used to confirm influenza virus infection, including laboratory testing and radiographic imaging, and 	CAP	MK	KH	IBL	M-CHT, INT, O-QZ	F&S	3	-	NLHT39.1

	<p>differentiate between typical seasonal flu, avian flu, and swine flu.</p> <ul style="list-style-type: none"> Summarize the prevention strategies, including vaccination and public health measures, and describe antiviral and supportive treatment options for influenza, with a focus on high-risk populations and outbreak management. Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Marad ān'flūynza Vayrūsī (Influenza virus disease) along with contemporary medical sciences. 									
CO1, CO3, CO5	<ul style="list-style-type: none"> Explain the etiological agent, transmission pathways, and pathophysiological mechanisms by which SARS affects the respiratory system. Recognize the typical signs, symptoms, and potential complications of SARS, differentiating it from other respiratory illnesses based on clinical presentation. Describe the diagnostic approaches for SARS, including laboratory tests and imaging, and understand the principles behind each method. Discuss preventive measures, isolation protocols, and management options, including supportive care and antiviral therapies, relevant to SARS, emphasizing the role of infection control in clinical settings. 	CAP	MK	KH	GBL	O-QZ, T-CS, OSCE, CHK	F&S	3	-	NLHT39.2

	<ul style="list-style-type: none"> Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Marāḍ Sārīs (SARS / Severe Acute Respiratory Syndrome) along with contemporary medical sciences. 									
CO1, CO3, CO5	<ul style="list-style-type: none"> Describe the etiology, structure, and pathophysiology of coronavirus disease, focusing on the mechanisms of infection, immune response, and virus-host interactions. Recognize the clinical signs and symptoms of coronavirus disease, understand the diagnostic criteria, and interpret common laboratory and radiological findings used for diagnosis. Develop a comprehensive approach for the management of coronavirus disease, including pharmacologic and supportive treatments, preventive measures, and public health strategies to control transmission. Analyze the broader implications of coronavirus outbreaks on healthcare systems, mental health, and socio-economic factors, including the role of healthcare professionals in pandemic preparedness and response. Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Marāḍ 	CAN	MK	KH	EDU	INT, O-QZ, CL-PR	F&S	3	-	NLHT39.3

	Kūrūna Vayrūsī (Coronavirus disease) along with contemporary medical sciences.									
CO1, CO3, CO5	<ul style="list-style-type: none"> Describe the causative organisms, modes of transmission, and global and regional epidemiological patterns of leptospirosis and Q-fever. Recognize the clinical signs, symptoms, and disease progression of leptospirosis and Q-fever, and outline appropriate diagnostic tools and laboratory tests for accurate identification. Discuss the standard treatment protocols, including antimicrobial therapies, supportive care, and preventive measures for managing leptospirosis and Q-fever in clinical practice. Explain preventive strategies, including vaccination (if applicable), personal protective measures, and community-level interventions to control outbreaks and reduce the spread of leptospirosis and Q-fever. Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Dā'al-lybtūsbirūsīs wa Ḥummā-Q (Leptospirosis / Weil's disease and Q-Fever) along with contemporary medical sciences. 	CAP	MK	KH	PL	INT, PA, T-CS	F&S	3	-	NLHT39.4
CO1, CO3	<ul style="list-style-type: none"> Explain the pathophysiology of enteric fever, including the mode of transmission, chronic 	CC	MK	K	L&PPT , L	INT, T-OBT	F&S	3	-	LH

	<p>carrier state, causative organism (Salmonella typhi), and its impact on gastrointestinal and systemic health.</p> <ul style="list-style-type: none"> Identify the clinical manifestations of enteric fever and differentiate it from other febrile illnesses. <p>Demonstrate proficiency in diagnostic approaches, including laboratory investigations and relevant diagnostic criteria.</p>									
CO1	<p>Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ḥummā Mi'v'iya (Enteric fever) along with contemporary medical sciences and discuss the use of antibiotics, prevention of drug resistance, and patient care in various settings.</p>	CAP	MK	KH	L&GD	INT, T-CS, T-OBT	F&S	3	-	LH
CO5	<p>Explain preventive strategies to control and prevent enteric fever in communities including vaccination, sanitation, and hygiene practices.</p>	CC	MK	K	L&GD	INT	F&S	3	-	LH
CO1, CO3	<ul style="list-style-type: none"> Describe the etiology, epidemiology, life cycle of the malarial parasite, clinical features, complications, investigations, and management of malarial fever. Discuss stable (uncomplicated) and unstable (complicated) malaria and define the criteria to diagnose Severe and Complicated Falciparum Malaria. 	CC	MK	K	L&GD, L&PPT	INT, T-OBT, QZ, T-CS	F&S	3	-	LH

CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ḥummā Ajāmiyya (Malarial fever) along with contemporary medical sciences	CAP	MK	KH	L&GD	INT, Log book	F&S	3	-	LH
CO1, CO3	Describe classic dengue (breakbone fever), Identify the clinical signs and symptoms of dengue fever, and differentiate between mild and severe forms (e.g., dengue haemorrhagic fever/DHF, dengue shock syndrome/DSS).	CC	MK	K	L&GD, L&PPT	T-CS, INT, T-OBT	F&S	3	-	LH
CO1	Apply the evidence-based guidelines for the management of dengue fever (including fluid therapy, supportive care, and the management of complications), as per contemporary medical sciences as well as Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ḥummā Danj (Dengue Fever).	CAP	MK	KH	L&GD	INT, T-CS	F&S	3	-	LH
CO1	Describe the etiology, transmission, and epidemiology of Ḥummā Chikūngūnyā (Chikungunya fever), including the role of the Aedes mosquito in viral transmission.	CC	MK	K	L&PPT	T-OBT, INT	F&S	3	-	LH
CO1, CO3	Differentiate Chikungunya fever from other febrile illnesses with similar symptoms, such as dengue and malaria, using clinical examination and diagnostic tools (e.g., serology, PCR).	CAN	MK	KH	L&PPT, L&GD	M-CHT, T-CS, INT	F&S	3	-	LH
CO1, CO5	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ḥummā Chikūngūnyā along with management strategies of contemporary medical sciences (including symptomatic treatment, pain management,	CAP	MK	KH	L&GD	Log book, T-CS	F&S	3	-	LH

	prevention of complications, along with the role of vector control in outbreak prevention).									
CO1	Describe the etiological agents, clinical features, and epidemiology of Leishmaniasis, including the differences between cutaneous, visceral, and mucocutaneous forms of the disease.	CC	DK	K	L_VC, L&PPT	INT, T-CS	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Kālā āzār (Leishmaniasis) along with the management strategies of contemporary medical sciences (including pharmacological options (antimony compounds, amphotericin B, etc.), supportive care, and strategies for preventing disease transmission.	CAP	MK	KH	L&GD	Log book, T-CS	F&S	3	-	LH
CO1, CO3	Discuss etiology, epidemiology, types, clinical features, diagnosis, treatment, and prophylaxis of Ṭā'ūn (Plague).	CC	DK	K	L&PPT, L_VC	INT, T-OBT	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ṭā'ūn (Plague) along with contemporary medical sciences.	CAP	DK	KH	L&GD	T-OBT, INT, Log book	F&S	3	-	LH
CO1, CO3	<ul style="list-style-type: none"> Explain the pathophysiology of Ebola Virus Disease (EVD), including the viral transmission, cellular mechanisms, and immune response involved in disease progression. Discuss the clinical signs and symptoms of EVD, and differentiate it from other infectious diseases. 	CC	DK	K	L, L&PPT	INT, T-OBT	F&S	3	-	LH

CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Marāḍ Aybolā Vayrūsī Ebola virus disease along with current management strategies for Ebola Virus Disease, including supportive care, antiviral treatments, and infection control measures in healthcare settings as per contemporary medical sciences.	CAP	DK	KH	L&GD	INT, T-CS, Log book	F&S	3	-	LH
CO1, CO3, CO6	<ul style="list-style-type: none"> Describe the molecular structure, transmission routes (primarily via Aedes mosquitoes), and pathophysiological mechanisms of Zika virus infection. Explain the common clinical features of Zika virus infection, including symptoms such as rash, fever, joint pain, and conjunctivitis, and differentiate it from other vector-borne diseases through diagnostic tests. Discuss the global impact of Zika virus outbreaks, particularly on pregnancy and fetal development (e.g., microcephaly), and analyze the ethical challenges in managing outbreaks and advising affected populations. 	CC	DK	K	L&PPT , L_VC	T-OBT, INT	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Marāḍ Dīka Vayrūsī (Zika Virus) along with current management protocols for Zika virus infection, focusing on symptomatic treatment, and discuss preventive measures, including mosquito control strategies and public health interventions.	CAP	DK	KH	L&GD	Log book, INT	F&S	3	-	LH

CO1, CO3, CO5	<ul style="list-style-type: none"> Describe the etiology, clinical features, and transmission mechanisms of Kyasanur Forest Disease (KFD), including its vector, reservoir, and risk factors. Identify and assess the clinical presentation of KFD, including its differential diagnosis from other febrile illnesses, and apply appropriate diagnostic tests. Recognize the public health importance of KFD, and advocate for preventive measures, such as vaccination, vector control, and awareness campaigns, in endemic regions. 	CC	DK	K	L&PPT , L_VC	T-OBT, INT, T-CS	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Ḥummā Maymūn Vayrūsī / Maraḍ janglī Kīyāsānūr (Monkey Fever / Kyasanur Forest Disease/KFD) along with contemporary medical sciences.	CAP	DK	KH	L&GD	Log book, INT	F&S	3	-	LH
CO1, CO3, CO5	<ul style="list-style-type: none"> Explain the pathophysiology of HIV infection, including the mechanisms of HIV replication, the immune system's response, and the progression to AIDS. Identify the clinical features of HIV infection and AIDS at various stages, and apply diagnostic criteria and laboratory tests, including serology and CD4 count, for accurate diagnosis and monitoring of the disease. Explain the primary and secondary prevention strategies for HIV, including safe practices, 	CC	DK	K	L_VC, L&PPT , L&GD	INT, O-QZ, T-OBT	F&S	3	-	LH

	antiretroviral therapy (ART), and the role of pre-exposure prophylaxis (PrEP) in reducing transmission risk.									
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Aych-āī-vī wa aydz (HIV and AIDS) along with contemporary medical sciences.	CAP	DK	KH	L&GD	Log book, INT	F&S	3	-	LH
CO1, CO3	Discuss the etiology, pathophysiology, and clinical presentation of cholera, including its transmission, symptoms, complications, diagnosis through patient history, clinical examination, and laboratory investigations (e.g., stool culture, rapid diagnostic tests).	CC	MK	K	L&PPT , L, L&GD	QZ , INT, T-OBT	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Hayḍa Wabā'ī (Cholera) along with management plan including fluid and electrolyte management, antibiotic therapy, and prevention strategies as per contemporary medical sciences.	CAP	MK	KH	L&GD	Log book, INT	F&S	3	-	LH
CO1, CO3	<ul style="list-style-type: none"> Identify and describe the etiology, transmission, and epidemiology of Japanese-B Encephalitis (JE), including its clinical presentation and risk factors in endemic regions. Explain the pathophysiology of Japanese-B Encephalitis, emphasizing the neurological involvement and the associated complications, and discuss the diagnostic approach for Japanese-B Encephalitis, including clinical 	CC	DK	K	L&GD, L&PPT	O-QZ, INT, T-OBT	F&S	3	-	LH

	evaluation, laboratory tests (such as serology and PCR), and imaging techniques.									
CO1, CO5	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Itihāb al-dimāgh al-yābānī – B (Japanese B Encephalitis) along with the management strategies including supportive care, prevention through vaccination, and public health interventions in endemic areas.	CAP	DK	KH	L&GD	Log book, T-OBT, INT	F&S	3	-	LH
CO1, CO3	<ul style="list-style-type: none"> Describe the etiology, transmission, and pathophysiology of lymphatic filariasis, including the role of Wuchereria bancrofti, Brugia malayi, and Brugia timori in disease development. Identify the clinical features of lymphatic filariasis, including acute, subclinical, and chronic forms (such as elephantiasis), and distinguish them from other tropical diseases. Discuss the diagnostic methods used in lymphatic filariasis, including laboratory techniques like blood smears, antigen tests, and imaging, along with their relevance in different stages of the disease. 	CC	DK	K	L&PPT , L_VC	T-CS, QZ , INT, T-OBT	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Dā' al-Fīl al-limfāwīya (Lymphatic filariasis) along with the management plan covering both	CAP	DK	KH	L&PPT , L&GD	T-OBT, INT, Log book, T-CS	F&S	3	-	LH

	pharmacological treatments (such as DEC, albendazole, and ivermectin) and public health strategies for prevention, including mass drug administration programs.									
CO1, CO3	<ul style="list-style-type: none"> Describe the life cycle, pathophysiology, clinical features, and diagnostic methods of Taeniasis, Cysticercosis, and Neurocysticercosis, including the distinction between their presentations. Discuss the diagnosis of Taeniasis, Cysticercosis, and Neurocysticercosis based on clinical symptoms, laboratory tests (e.g., stool examination, imaging), and serological assays. 	CC	NK	K	L&PPT , L_VC	INT, T-OBT, QZ , T-CS	F&S	3	-	LH
CO1	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Dā'al-sharītiāt wa Dā'al-kīsāt al-mudhanibāt wa Dā' al-kīsāt al- mudhanibāt al-a'sabī (Taeniasis, Cysticercosis, and Neurocysticercosis) along with the contemporary system of medicine.	CAP	NK	KH	L&GD	INT, Log book	F&S	3	-	LH
CO2, CO3	Demonstrate a systematic approach to history taking and physical examination for patients suspected of infectious diseases, identifying risk factors (e.g., travel, contaminated food/water) presenting symptoms (such as persistent fever, abdominal pain, abdominal pain, seizures, neurological deficits, severe joint pain, rash etc.), and history of mosquito exposure, lymphadenopathy, jaundice, rash etc.) and relevant physical signs.	PSY-MEC	MK	SH	RP	Mini-CEX, DOAP, OSCE	F&S	3	-	NLHP39.1
CO3	Interpret common diagnostic investigations for infectious diseases, including blood cultures, serological tests, PCR,	CE	MK	SH	W	Mini-CEX, DOAP,	F&S	3	-	NLHP39.2

	and rapid antigen tests, while applying infection control protocols and understanding the indications, limitations, and clinical relevance of each test.					OSPE, Log book				
CO1	Develop a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr for common infectious diseases considering disease stage, patient needs, preferences, and healthcare resources along with management strategies of contemporary medical sciences (including symptomatic treatment, pain management, prevention of complications, role of vector control in outbreak prevention etc.).	CS	MK	D	CBL	Portfolios, PA, Log book	F&S	3	-	NLHP39.3
CO5, CO6	<ul style="list-style-type: none"> • Demonstrate effective communication skills in educating patients and their families about prevention, control, and management of infectious diseases, including hygiene practices, vaccination importance, and infection prevention strategies. • Demonstrate the ability to provide compassionate, non-stigmatizing care to individuals with HIV/AIDS, addressing psychosocial issues, counseling for adherence to ART, and discussing ethical considerations in the treatment and care of HIV-positive patients. 	AFT-VAL	NK	SH	RP	Log book, OSCE, DOPS, PA, DOPS	F&S	3	-	NLHP39.4
CO5	Describe the public health strategies for the control and prevention of infectious diseases, and demonstrate the ability to participate in outbreak investigation, contact	PSY-GUD	MK	SH	SIM	Log book, CHK, OSPE	F&S	3	-	NLHP39.5

	tracing, and community health education to prevent disease spread.									
CO1, CO3	Demonstrate competency in the collection, handling, and interpretation of laboratory samples (e.g., blood, urine, sputum) for diagnosing infectious diseases, including selecting appropriate tests, maintaining aseptic techniques, and interpreting common diagnostic results.	PSY-GUD	DK	SH	SIM, DL	DOAP, OSPE	F&S	3	-	NLHP39.6

Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT39.1	Marāḍ ān'flūynza Vayrūsī (Influenza virus disease)	<p>Inquiry-Based Learning (Duration: 120 minutes)</p> <p>In this session, students will engage in a case study analysis of an influenza virus outbreak. They will explore real-world scenarios involving patient symptoms, transmission patterns, and epidemiological data. Working in small groups, students will investigate and present on topics such as viral structure, modes of transmission, immunity response, and preventive measures. Guided by prompts, they will generate hypotheses, evaluate diagnostic methods, and propose public health interventions. This hands-on approach will encourage critical thinking, collaborative problem-solving, and applying theoretical knowledge to practical cases.</p>
NLHT39.2	Marāḍ Sārīs (SARS / Severe Acute Respiratory Syndrome)	<p>Game-Based Learning (Duration: 60 minutes)</p> <p>This immersive activity will enhance critical thinking, teamwork, and real-time decision-making skills, reinforcing knowledge of SARS in an engaging, practical context.</p>

		Students will engage in a digital simulation game where they will assume the roles of healthcare professionals responding to a SARS outbreak. Through scenario-based challenges, students will make diagnostic and treatment decisions, learn about viral transmission and epidemiology, and collaborate to manage resources and patient outcomes.
NLHT39.3	Marāḍ Kūrūna Vayrūsī (Coronavirus disease)	<p>Edutainment (Duration: 120 minutes)</p> <p>This activity will encourage teamwork, reinforce core knowledge, and maintain high levels of engagement, making the learning experience both educational and enjoyable.</p> <p>Students will be divided into small groups, and answer rapid-fire questions on COVID-19's virology, transmission, symptoms, prevention, and treatment. The quiz format uses game-show elements with visuals, sound effects, and bonus rounds to reinforce learning in an engaging way.</p>
NLHT39.4	Dā'al-lybtūsbirūsīs wa Ḥummā-Q (Leptospirosis / Weil's disease and Q-Fever)	<p>Peer Learning (Duration: 60 minutes)</p> <p>In this session, students will collaborate in small groups to discuss and analyze cases of Leptospirosis and Q-Fever. They will identify clinical features, diagnostic approaches, and management strategies. Each group will review recent research articles, exchange insights, and present their findings in a brief session, fostering a deeper understanding of these zoonotic diseases through discussion and shared learning. Facilitators will guide discussions to ensure key learning outcomes are met and clarify complex topics.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity
NLHP39.1	History-Taking and Examination for Infectious Diseases	Role Plays (Duration: 180 minutes)

		<p>This method combines observational learning and supervised practice to build clinical competency in examining patients with symptoms of infectious disease. The steps are as follows.</p> <p>Pre-Activity Preparation: Students will watch a demonstration video and read guidelines on examination techniques and history-taking to identify symptoms. Specific to infectious diseases.</p> <p>Hands-On Practice (Role Play): In pairs, students will practice history-taking and physical examination on each other or simulated patients, focusing on identifying relevant signs.</p> <p>Faculty Supervision and Feedback: The instructor will observe and provide real-time feedback, correcting techniques and guiding students on interpreting findings.</p> <p>Reflection and Self-Assessment: Students will complete a checklist to self-assess their skills and identify areas for improvement.</p>
NLHP39.2	Diagnostic tests interpretation for infectious diseases	<p>Workshops (Duration: 180 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for diseases of the liver.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests for infectious diseases, including blood cultures, serological tests, PCR, and rapid antigen tests, while applying infection control protocols and understanding indications, limitations, and clinical relevance of each test.</p>

		<p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p> <p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for infectious diseases.</p>
NLHP39.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 180 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common infectious diseases, focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p>

		<p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-‘Ilāj wa ‘Ilāj including ‘Ilāj bi’l Taghdhiya, ‘Ilāj bi’l Dawā’ and ‘Ilāj bi’l Tadbīr tailored to the specific case, considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP39.4	Patient Education on infectious diseases	<p>Role Plays (Duration: 120 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding infectious diseases, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on common infectious diseases.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of infectious diseases. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with infectious diseases.</p> <p>Role-Playing Session: The healthcare provider will educate the patients on the prevention, control, and management of infectious diseases, including hygiene</p>

		<p>practices, vaccination importance, infection prevention strategies, etc. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role-play, peers, and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions</p>
NLHP39.5	Public Health Principles	<p>Simulation (Duration: 150 minutes)</p> <p>This approach will encourage active learning, critical thinking, and direct application of public health concepts relevant to infectious disease management.</p> <p>Conduct a simulated outbreak scenario where students will work in small groups to manage a fictional infectious disease outbreak. Students will engage in activities like data collection, contact tracing, and planning public health interventions. Facilitators will provide "case updates" as the simulation progresses, requiring students to adapt their strategies based on new information, model public health communication, and consider appropriate prevention measures.</p> <p>Role Assignments: Assign roles such as epidemiologist, contact tracer, health educator, and data analyst to encourage teamwork and practical experience in various public health functions.</p> <p>Debriefing Session: Follow up with a debrief where students discuss what strategies were effective, areas for improvement, and insights gained from the simulation on the complexities of public health responses.</p>

NLHP39.6	Laboratory skills	<p>Simulation and Demonstration Lab (Duration: 150 minutes)</p> <p>In this method, students will engage in hands-on practice within a simulated laboratory setting, where they will be guided through each step of sample collection, handling, and interpretation:</p> <p>Demonstration and Practice: The instructor will demonstrate correct techniques for sample collection (blood, urine, sputum) with emphasis on aseptic procedures. Then students will perform these techniques under supervision, focusing on test selection, handling protocols, and contamination prevention.</p> <p>Interpretation of Results: Students will analyze common diagnostic results with case scenarios, interpreting findings to diagnose infectious diseases.</p> <p>Formative Feedback: Instructors will provide immediate feedback on technique and result interpretation, with additional time allotted for repeated practice of challenging areas.</p> <p>Rationale: This hands-on, feedback-driven approach will build competency in laboratory skills, enhance confidence in diagnostic interpretation, and reinforce aseptic practices essential for infectious disease management.</p>
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Topic 40 امراض مفاصل وعظام Amrād-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders) (LH : 4, NLHT: 3, NLHP: 6 hours)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO3	<ul style="list-style-type: none"> Explain the risk factors, immunopathogenesis, genetic predispositions, and environmental triggers contributing to the onset and progression of rheumatoid arthritis. Describe the clinical features of rheumatoid arthritis, including joint swelling, pain, morning 	CAP	MK	KH	GBL	OSCE, CHK, Mini-CEX	F&S	3	-	NLHT40.1

	<p>stiffness, and extra-articular manifestations, and diagnosis based on American College of Rheumatology/European League Against Rheumatism Classification Criteria for Rheumatoid Arthritis (2010).</p> <ul style="list-style-type: none"> • Discuss polymyalgia rheumatica and its differential diagnosis with giant cell arthritis. • Discuss the use of Disease-Modifying Anti-Rheumatic Drugs (DMARDs), biologics, and corticosteroids in managing rheumatoid arthritis, focusing on mechanisms, indications, contraindications, and potential side effects. • Discuss the etiology, clinical manifestations, diagnosis (cardinal features), and management of gout. • Explain the role of hyperuricemia in gout and discuss pseudogout; calcium pyrophosphate dihydrate (CPPD) deposition disease; and pyrophosphate arthropathy. • Explain ankylosing spondylitis, clinical features, extra-articular manifestations, investigations (Radiological manifestations and discuss the modified New York diagnostic criteria for ankylosing spondylitis (AS). • Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Waja' al-Mafāsīl Ḥudāri (Rheumatoid Arthritis), and Itihāb al-Faqarāt al-tasalubī (Ankylosing 									
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	Spondylitis) along with contemporary medical sciences.									
CO1, CO3, CO4	<ul style="list-style-type: none"> Describe the Asbāb, Aqsām, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waja' al-Mafāṣil (Osteoarthritis) as per Unani medicine. Explain the etiology, pathophysiology, classification (based on joint involvements), risk factors (including genetic, metabolic, and mechanical factors), and ACR (American College of Rheumatology) diagnostic criteria for the diagnosis of OA. Differentiate OA from other forms of arthritis and musculoskeletal conditions using appropriate clinical evaluation techniques. Analyse indications for surgical interventions or referral to specialists in severe cases of Waja' al-Mafāṣil (Osteoarthritis). Explain the role of rehabilitation and the importance of multidisciplinary care in managing osteoarthritis. 	CAN	MK	KH	SDL	O-QZ, M-CHT	F&S	3	-	NLHT40.2
CO1, CO3	Describe the Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Waja' al-Zāhr wa Waja' al-Khāṣira (Upper and Lower backache) as per Unani medicine.	CC	DK	K	L&PPT	O-QZ, T-CS	F&S	3	-	LH

CO4	Differentiate between Waja' al-Zahr wa Waja' al-Khāṣira (Upper and Lower backache).	CAN	DK	KH	L&GD	INT	F&S	3	-	LH
CO1, CO3	<ul style="list-style-type: none"> Describe the common causes and pathophysiology of low back pain, including mechanical, inflammatory, degenerative, infectious, and neoplastic causes. Identify risk factors for developing low back pain, such as poor posture, occupational hazards, obesity, and sedentary lifestyle. 	CC	DK	K	L&GD, L&PPT, L_VC	INT, O-QZ, T-CS	F&S	3	-	LH
CO4	Analyse the indications for referral to specialists in complex/severe cases by identifying red flag signs.	CAN	DK	KH	L&GD	T-CS, INT	F&S	3	-	LH
CO1, CO3	Explain the Vaja-i-tasmīya (etymology), Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Ḥadaba wa Riyāḥ al-Afrisa (Kyphosis and Koch's spine) as per Unani medicine.	CC	DK	K	L&GD, L&PPT	QZ, T-CS, INT	F&S	3	-	LH
CO1, CO3	Explain the Vaja-i-tasmīya (etymology), Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of Taḥajjur wa Ṣalāba al-Mafāṣil (Ankylosing Arthritis) as per Unani medicine.	CC	DK	K	L&GD, L, L_VC	INT, O-QZ, T-CS	F&S	3	-	LH
CO1, CO3	Explain the Vaja-i-tasmīya (etymology), Asbāb, 'Alāmāt, Tashkhīṣ, Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr of 'Irq al-Nasā (Sciatica) as per Unani and contemporary system of medicine.	CC	MK	K	L&PPT, L_VC	CL-PR, T-CS, QZ	F&S	3	-	LH

CO1, CO3, CO4	<ul style="list-style-type: none"> Differentiate sciatica from other causes of leg and back pain, by assessing signs of nerve root compression, including positive straight-leg raise test (Lasegue's sign), motor weakness, altered reflexes, and sensory deficits along the affected dermatome. Analyze indications for surgical intervention or referral to the specialists in complex/severe cases (e.g., laminectomy, discectomy) in cases of refractory sciatica or neurological deficits such as cauda equina syndrome. 	CAN	MK	KH	L_VC, L&PPT , L&GD	O-QZ, T-CS, WP, INT	F&S	3	-	LH
CO1, CO3	Discuss the role of rehabilitation, including strengthening exercises and manual therapies, in improving long-term outcomes and functional status in patients with chronic sciatica.	CC	MK	K	L&GD	INT	F&S	3	-	LH
CO1, CO3	Explain the underlying pathophysiological mechanisms of Lin al-'izām wa Wahn al-'Izām (Osteomalacia and Osteoporosis), including the roles of vitamin D, calcium, and hormonal regulation in bone health.	CC	NK	K	L_VC, L&PPT	INT, T-OBT, T-CS	F&S	3	-	LH
CO1, CO3	Recognize and differentiate the clinical presentations, signs, and symptoms of osteomalacia and osteoporosis, enabling accurate diagnosis and assessment of disease severity.	CAN	NK	KH	L&PPT , L_VC	T-CS, O-QZ, INT	F&S	3	-	LH
CO1, CO3	Describe the diagnostic tools and investigations used in osteomalacia and osteoporosis, including biochemical tests, imaging techniques, bone density measurement, and their interpretation.	CC	NK	K	L_VC, L&PPT	O-QZ, INT, T-CS	F&S	3	-	LH

CO1, CO5	Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy and discuss the preventive strategies for Lin al-'izām wa Wahn al-'Izām (Osteomalacia and Osteoporosis) along with contemporary medical sciences.	CAP	NK	KH	L&GD	T-OBT, INT	F&S	3	-	LH
CO2, CO3	Perform a comprehensive history-taking and focused musculoskeletal examination of a patient with suspected muscle weakness / osteoarthritis / inflammatory / infective arthritis, including joint assessment and functional evaluation (e.g., GALS screening, range of motion assessment, special tests, palpation, etc.).	PSY-MEC	MK	SH	RP	Mini-CEX, OSCE, DOAP	F&S	3	-	NLHP40.1
CO3	Interpret results of diagnostic tests for diseases of the musculoskeletal systems e.g. imaging studies including X-rays, and MRI images, nerve conduction studies, bone mineral density (BMD) assessments and laboratory tests (e.g., HLA-B27 antigen testing, serum uric acid levels, serum calcium and phosphate levels, Rheumatoid factor, Anti-citrullinated protein antibody (ACPA) / Anticyclic citrullinated peptide (Anti-CCP), synovial fluid analysis, antinuclear antibodies, ANA test, CK levels, and genetic panels etc.) with relevant indications and contraindications.	CE	MK	SH	W	Log book, INT, Mini-CEX	F&S	3	-	NLHP40.2
CO1	Develop a comprehensive management plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as well as a rehabilitation plan in collaboration with physiotherapy and occupational therapy teams for patients with musculoskeletal disorders including chronic myopathies,	CS	MK	D	CBL	PA, Portfolios, Log book	F&S	3	-	NLHP40.3

	considering disease stage, patient needs, preferences, and healthcare resources.									
CO5, CO6	Communicate empathetically with patients and caregivers about the disease process, treatment options, and lifestyle modifications and counsel them on effective preventive measures and early recognition strategies for various musculoskeletal diseases, including awareness of symptoms and risk factors, exercise, weight management, and ergonomic practices.	AFT-VAL	NK	SH	RP	Log book, PA, Portfolios, OSCE	F&S	3	-	NLHP40.4
CO1, CO3, CO4	<ul style="list-style-type: none"> Describe the etiology, pathophysiology, risk factors, and classification of septic arthritis. Identify the clinical manifestations, differentiate septic arthritis from other joint conditions, and describe its complications. Explain laboratory investigations (synovial fluid analysis, blood tests) and imaging modalities (X-ray, ultrasound, MRI) to diagnose septic arthritis. Analyse indications for surgical drainage or referral to specialists in severe cases of septic arthritis. Define viral arthritis and describe its etiology, pathogenesis, and classification based on causative viruses (e.g., Parvovirus B19, Chikungunya, Dengue, EBV, CMV, Hepatitis B/C, Rubella, Alphaviruses etc.). Describe the clinical features of viral arthritis, including distinguishing symptoms, disease course, and differential diagnosis. 	CAN	MK	KH	IBL	CHK, SA, CBA, Mini- CEX, QZ	F&S	3	-	NLHT40.3

	<ul style="list-style-type: none"> • Explain laboratory findings (e.g., serology, viral markers) and imaging modalities (e.g., ultrasound, MRI) in viral arthritis. • Define osteomyelitis and classify it based on etiology, pathogenesis, and clinical course. • Explain the pathophysiological mechanisms and predisposing factors leading to osteomyelitis. • Identify the clinical signs and symptoms of osteomyelitis and interpret laboratory tests (e.g., ESR, CRP, blood cultures) and imaging studies (X-rays, MRI, bone biopsy) findings in diagnosis. • Define tubercular arthritis, describe its etiology, pathophysiology, and epidemiological distribution. • Explain the clinical manifestations of tubercular arthritis, including distinguishing features and common differential diagnosis. • Analyze and interpret laboratory findings, radiological investigations (X-ray, MRI), and histopathology reports for diagnosing tubercular arthritis. • Discuss preventive strategies, including early detection, vaccination, and public health education about TB and musculoskeletal complications. • Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for Waja' al-Mafāsīl Muta'dī (Infective Arthritis) including 									
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	Waja' al-Mafāsil 'Ufūnī (Septic Arthritis), Waja' al-Mafāsil Vayrūsī (Viral Arthritis), Iltihāb al-'Azm wa al-naqī (Osteomyelitis), and Waja' al-Mafāsil Sillī (Tubercular Arthritis) along with contemporary medical sciences.									
CO1, CO3, CO4	<ul style="list-style-type: none"> Describe the definition and etiology of various myopathies, including inherited and acquired types. Classify myopathies based on genetic, metabolic, inflammatory, toxic, and endocrine causes. Explain the clinical features, diagnostic criteria, and differential diagnosis of common myopathies such as muscular dystrophies, inflammatory, and metabolic myopathies. Outline the approach to diagnostic investigations including muscle enzymes, electromyography (EMG), muscle biopsy, and genetic testing. Recognize complications and prognosis of different types of myopathies. Apply the Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr as an adjuvant therapy for I'tilāl al-'Aḍalāt (Myopathies) including I'tilāl al-'Aḍalāt Mawrūthī (Inherited / Genetic Myopathies) and I'tilāl al-'Aḍalāt Iktisābī (Acquired Myopathies) along with contemporary medical sciences. 	CAN	NK	KH	L_VC, L&GD	O-QZ, SP, C-VC, CL-PR	F&S	3	-	LH

	<ul style="list-style-type: none"> Analyze the indications for appropriate referral for specialized management. 								
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Non Lecture Hour Theory

S.No	Name	Description of Theory Activity
NLHT40.1	Ilthāb al-Mafāsil (Inflammatory Arthritis): Waja' al-Mafāsil Ḥudāri (Rheumatoid Arthritis), Niqris (Gout), and Ilthāb al-Faqarāt al-tasalubī (Ankylosing Spondylitis)	<p>Game-Based Learning (Duration: 60 minutes)</p> <p>In this session, students will participate in a competitive, team-based quiz game focused on rheumatoid arthritis, gout, and ankylosing spondylitis. Each team will navigate through case-based scenarios and clinical puzzles, answering questions related to diagnosis, symptomatology, treatment protocols, and management strategies. Points are awarded for correct answers, fostering a friendly competition while reinforcing critical knowledge. This interactive activity will enhance retention, clinical reasoning, and collaborative learning skills, making complex musculoskeletal disorders accessible and memorable for UG medical graduates.</p>
NLHT40.2	Waja' al-Mafāsil (Osteoarthritis)	<p>Self-Directed Learning (Duration: 60 minutes)</p> <p>In this activity, students will independently explore Waja' al-Mafāsil (Osteoarthritis), focusing on its pathophysiology, clinical features, and Unani management approaches. They will be assigned to review current research articles, case studies, and clinical guidelines. Additionally, students will prepare a short presentation or summary on treatment options, including both conventional and Unani perspectives, to share with peers in a follow-up session. This activity will promote critical thinking, enhance research skills, and encourage the integration of Unani principles with contemporary medical understanding.</p>

<p>NLHT40.3</p>	<p>Waja' al-Mafāsil Muta'dī (Infective Arthritis): Waja' al-Mafāsil 'Ufūnī (Septic Arthritis), Waja' al-Mafāsil Vayrūsī (Viral Arthritis), Iltihāb al-'Aẓm wa al-naqī (Osteomyelitis), and Waja' al-Mafāsil Sillī (Tubercular Arthritis)</p>	<p>Inquiry-Based Learning (Duration: 60 minutes)</p> <p>This activity will foster deep learning, enhance diagnostic accuracy, and encourage critical thinking and independent exploration. It will prepare students for real-world clinical scenarios by promoting curiosity-driven learning and self-directed inquiry. The activity follows these steps:</p> <p>1. Exploration and Question Formulation (Trigger Phase): Students will be presented with a real or simulated case scenario of a patient exhibiting symptoms such as joint pain, swelling, fever, and other systemic symptoms. They will be encouraged to explore the case context and formulate their own investigative questions regarding potential causes of infective arthritis (e.g., septic arthritis, viral arthritis, osteomyelitis, and tubercular arthritis). The Facilitator will encourage students to generate open-ended questions and identify gaps in their existing knowledge and will guide them in refining their inquiries based on clinical relevance and available evidence.</p> <p>2. Self-Directed Inquiry and Knowledge Exploration (Research Phase): Students will independently or in small groups explore credible sources such as clinical guidelines (e.g., WHO, CDC), Unani medical texts, and scientific literature to investigate aspects related to infective arthritis. Each group will focus on different infection types, analyzing pathophysiology, clinical presentations, and diagnostic approaches. The Facilitator will provide guidance on evaluating sources, ensuring critical appraisal of evidence, and will encourage students to synthesize information from different medical perspectives.</p> <p>3. Collaborative Discussion and Concept Development (Analysis Phase): Students will engage in group discussions to share their findings, interpret lab results, critically analyze differential diagnosis, and develop evidence-based management strategies integrating Unani and contemporary medical approaches. Concept</p>
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		<p>maps will be used to visualize symptom-disease correlations. The Facilitator will promote dialogue, stimulate deeper thinking, clarify misconceptions, will also facilitate peer-to-peer learning and encourage diverse viewpoints.</p> <p>4. Hypothesis Testing and Clinical Application (Synthesis Phase): Students will use their acquired knowledge to construct potential diagnostic and treatment pathways for the given case. They will propose integrated management plans, combining modern medical interventions with Unani treatment modalities. The Facilitator will provide clinical insights and constructive feedback on the feasibility of proposed strategies and will encourage practical application of knowledge to ensure comprehensive understanding.</p> <p>5. Reflection and Critical Appraisal (Evaluation Phase): Students will reflect on their learning journey, challenges faced, and insights gained through self-assessment and peer feedback. They will document their reflections in journals and engage in faculty-led debriefing sessions to reinforce key learning points. The Facilitator will offer feedback on reflections, encouraging a growth mindset and lifelong learning, and will also identify areas for improvement and provide targeted guidance.</p> <p>6. Real-World Application and Integration (Competency Phase): Students will apply their acquired knowledge in clinical settings through supervised rotations in OPDs/wards, engaging in patient management and discussions with mentors to evaluate treatment outcomes. The Facilitator will supervise clinical interactions, provide real-time feedback, will also assess decision-making skills, and reinforce competency-based learning.</p>
Non Lecture Hour Practical		
S.No	Name	Description of Practical Activity

NLHP40.1	History-Taking and Examination for Musculoskeletal disorders	<p>Role Plays (Duration: 120 minutes)</p> <p>In this interactive, practical session, students will engage in role play to practice history-taking and physical examination for musculoskeletal diseases. Students will be divided into pairs, where one plays the role of the patient presenting with specific symptoms, and the other acts as the physician. Under faculty supervision, students will practice gathering relevant patient history, identifying key musculoskeletal complaints, and performing essential physical examination techniques. This hands-on experience will enhance clinical communication skills, diagnostic reasoning, and confidence in handling real-life scenarios.</p>
NLHP40.2	Diagnostic tests interpretation for Musculoskeletal disorders	<p>Workshops (Duration: 90 minutes)</p> <p>This interactive workshop will enhance clinical reasoning, practical skills and foster critical thinking, teamwork, and applying theoretical knowledge in real-world contexts by interpreting diagnostic results for musculoskeletal disorders.</p> <p>Pre-Activity Preparation: Students will review pre-assigned materials including video tutorials and articles on diagnostic tests including X-rays, and MRI images, nerve conduction studies, bone mineral density (BMD) assessments, and laboratory tests (e.g., HLA-B27 antigen testing, serum uric acid levels, serum calcium and phosphate levels, Rheumatoid factor, Anti-citrullinated protein antibody (ACPA) / Anticyclic citrullinated peptide (Anti-CCP), synovial fluid analysis, antinuclear antibodies, ANA test, etc., with relevant indications and interpretations for musculoskeletal disorders.</p> <p>Image Review Session: In small groups, students will analyze a series of images from diagnostic tests to identify abnormal findings.</p>

		<p>Group Interpretation Activity: Each group will interpret test results, discuss their findings and potential implications, and correlate them with clinical scenarios for diagnosis and management.</p> <p>Facilitated Discussion: The facilitator will lead a discussion to consolidate understanding, encourage critical thinking, and clarify any misconceptions regarding interpretation accuracy, common pitfalls, and clinical correlations based on the student's analysis.</p> <p>Feedback Session: Students will receive constructive feedback on their interpretations and engage in a reflective discussion to enhance their understanding of diagnostic processes for musculoskeletal disorders.</p>
NLHP40.3	Nuskha Navesī	<p>Case-Based Learning (Duration: 90 minutes)</p> <p>This approach will promote critical thinking, teamwork, and practical application of theoretical knowledge in real-world scenarios. Through this activity, students will individually reflect on adapting management to diverse patient scenarios and available resources. The steps are as follows:</p> <p>Pre-Activity Preparation: Students will review assigned relevant reading materials on common musculoskeletal disorders, focusing on Uṣūl-i-Tashkhīṣ wa Tajvīz (diagnostic and management principles).</p> <p>Case-Based Group Activity: In small groups, students will analyze assigned case scenarios, discussing patient symptoms, diagnostic results, and social context (needs, preferences, resource availability).</p> <p>Formulating a Management Plan: Each group will collaboratively prepare a step-by-step treatment plan based on Unani principles of Uṣūl-i-'Ilāj wa 'Ilāj including 'Ilāj bi'l Taghdhiya, 'Ilāj bi'l Dawā' and 'Ilāj bi'l Tadbīr tailored to the specific case,</p>

		<p>considering patient needs (e.g., symptom relief, dietary advice), disease severity, psychosocial support, and resource availability (e.g., access to medication etc.).</p> <p>Presentation and Feedback: Each group will present their management plan to the class, followed by a facilitated discussion and constructive feedback from peers and instructors on clinical reasoning and patient-centered care adjustments.</p>
NLHP40.4	Patient Education on Musculoskeletal Disorders	<p>Role Plays (Duration: 60 minutes)</p> <p>This activity will foster communication skills, empathy, and the ability to convey complex information effectively by highlighting the importance of effective communication with patients and caregivers in improving patient adherence and outcomes regarding Musculoskeletal disorders, focusing on empathy, clarity, and education. The steps are as follows:</p> <p>Pre-Activity Preparation: Divide students into small groups and assign roles as healthcare providers, patients, and caregivers. Provide background materials on common diseases of the musculoskeletal system, including common treatment options and lifestyle modifications.</p> <p>Scenario Development: Each group will create a realistic patient scenario involving the diagnosis, treatment options, and prognosis of the disease. (Develop specific challenges related to communication and patient education).</p> <p>Role Assignment: In pairs, one student will act as the healthcare provider and the other as the patient with a musculoskeletal disease.</p> <p>Role-Playing Session: The healthcare provider will educate the patients on recommended lifestyle changes, dietary modifications, and early recognition strategies for various musculoskeletal diseases, including awareness of symptoms and risk factors, exercise, weight management, and ergonomic practices while</p>

		<p>discussing the importance of follow-up appointments. (Emphasize empathetic communication, clear language, and active listening).</p> <p>Feedback Exchange: After each role play, peers and facilitators will provide constructive feedback on communication effectiveness, clarity, and empathy. (Discuss strategies for improving patient education on lifestyle modifications and follow-up care).</p> <p>Reflection: Students will reflect on their experiences and insights gained from the activity to enhance their future patient interactions</p>
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Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Sr No	CO No	Topic name
1.1	CO3	Differential Diagnosis of Mālankhūliyā (Melancholia)
1.2	CO1,CO3,CO4	Exploring Dā' al-Kalb, Mālankhūliyā Marāqī, and Quṭrub
1.3	CO4	Holistic Management of Sahar (Insomnia)
2.1	CO1	Pathophysiology of Amrāḍ-i-Ghudud lā Qanātī (Endocrine Disorders)
3.1	CO3	Laboratory Investigations in Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)
3.2	CO1	Pathophysiological mechanisms of Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)
3.3	CO1,CO5	Complications of Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)
3.4	CO1	Ma'mulāt-i-Maṭab for Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders)
4.1	CO3	Clinical features of common Amrāḍ-i-Tūrāth (Genetic Disorders)
5.1	CO4	Warning Signs & Referral for Ṣudā' (Headaches)
6.1	CO1,CO3	Diagnostic tests for Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis)
8.1	CO1	Clinical Manifestations of Sakta (Stroke)
9.1	CO3	Diagnostic approach to a patient in Coma
9.2	CO3	Initial management of Coma
10.1	CO1,CO2,CO6	Management strategies for Cognitive Disorders
11.1	CO4	Immediate and long term management of Ṣar' (Epilepsy)
11.2	CO3	Comprehensive Diagnostic Approach to Movement Disorders
11.3	CO3	Diagnostic criteria for Parkinson's Disease
11.4	CO1	Management of Marḍ-i-Bārkinsan (Parkinson's Disease)
12.1	CO1	Management strategies used for Sadr (Orthostatic Hypotension)

13.1	CO1,CO3	Diagnostic approach for Waram-i-A'ṣāb (Neuritis)
14.1	CO1,CO3	Overview of Ḍu'f-i-Dimāgh (Cerebral Asthenia)
15.1	CO3	Predisposing Factors, Patterns, and Diagnostic Indicators of Ḥumma (Fever)
15.2	CO1,CO3	Diagnosis and Assessment of Complications of Ḥummayāt (Fevers)
15.3	CO1	Nutritional Management in Fevers
15.4	CO1	Management strategies for Buḥrān (Crisis)
15.5	CO1	Ma'mulāt-i-Maṭab of Ḥummayāt (Fevers)
15.6	CO1	Principles and Strategic Approaches for Managing Ḥummā Yawm
16.1	CO1	Formulating a Treatment Plan for different types of Nazla wa Su'āl
17.1	CO1	Holistic Management of Ḍīq al-Nafas Shu'abi (Bronchial Asthma)
18.1	CO3,CO4	Differential diagnosis of Dhāt al-Ri'a (Pneumonia) on the basis of clinical features and investigations
18.2	CO3	Sil (Pulmonary Tuberculosis) concept and management
18.3	CO1	Concept and management of Dubayla al- Ri'a (Lung Abscess)
19.1	CO3	Clinical features investigations and diagnostic Criteria for Tanaffusī Dastaras Sindram Ḥād (ARDS) and acute lung injury
19.2	CO3,CO4	Management approaches for Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome)
20.1	CO3	Diagnostic tools used in identifying Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma)
21.1	CO1	Pathophysiology and clinical features of Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)
21.2	CO1,CO5	Prevention and management of Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)
22.1	CO1,CO3	Management plan for Amrād-i-Janb (Diseases of Pleura)
23.1	CO3	Diagnostic approach to Khafaqān (Palpitation)
23.2	CO3	Overview of Suqūṭ Qalb (Heart Failure)
24.1	CO1	Clinical presentation of Waja' al-Qalb (Angina Pectoris)

24.2	CO3	Diagnostic approach to Waja' al-Qalb (Angina Pectoris)
24.3	CO3	Interpretation of the levels of cardiac biomarkers in Ḥād Maytūta al-Qalb (Acute Myocardial Infarction)
25.1	CO1,CO3	Overview of Iltihābe Aḍal al-Qalb (Myocarditis)
25.2	CO3	Treatment plan for Amrād Aḍalat al-Qalb (Cardiomyopathies)
26.1	CO1	Treatment plan for Baṭan al-Qalb (endocarditis)
26.2	CO3	Overview of Dā' al-Qalb Hudāri (Rheumatic Heart disease)
27.1	CO1	Clinical features of Sur'a al-Qalb (Tachycardia)
27.2	CO3	Clinical features and complications of Buṭū' al-Qalb (Bradycardia)
28.1	CO3	Concept and management of Istisqā –ul-Qalb (Pericardial Effusion)
29.1	CO3	Management strategies for Ḍagḥ al-Dam Qawī (Hypertension)
29.2	CO1	Treatment plan for Dā' al-Qalb Ri'wī (Cor Pulmonale)
30.1	CO1,CO5	Management Plan of Sū'al-Qinya
30.2	CO1	Clinical Recognition of thalassemia and sickle cell anaemia
30.3	CO3	Management strategies of Haemophilia
30.4	CO1	Concept and management of Acute and chronic leukaemia
30.5	CO3	Management strategies of Hodgkin's and non- Hodgkin's lymphoma.
32.1	CO1,CO3,CO4	تقهقری Taqahqur-i-Marī (Gastro-esophageal reflux disease)
33.1	CO1,CO3	Ḍu'f al-Haḍm, Sū' al-Haḍm, Tukhma wa Buṭlān al-Haḍm (Delayed digestion, Dyspepsia, Perverted digestion and failure of digestion)
33.2	CO1,CO3	Waram-i-Mi'da (Gastritis)
33.3	CO1,CO3,CO4	Qurūḥ-i-Mi'da wa Athna 'Ashrī (Peptic Ulcer Disease / PUD)
33.4	CO1,CO3,CO4	Qay' al-Dam (Hematemesis)
33.5	CO1,CO3	Fuwāq / Hichkī (Hiccup)

33.6	CO1,CO3	Jū' al-Baqar / Būlīmūs wa Jū' al-Kalb / Al-Shahwa al-Kalbiyya (Bulimia / Food aversion and Voracious appetite)
34.1	CO1,CO3,CO4	Diqq al-Am'ā' (Intestinal tuberculosis)
34.2	CO1,CO2,CO3,CO4	Teḥrīk Mi'v'i sīndrom (Irritable Bowel Syndrome)
34.3	CO1,CO3,CO4	Marad Iltihāb al-Am'ā' (Inflammatory Bowel Disease/IBD)
35.1	CO1,CO3	Waram al-Kabid (Hepatitis)
35.2	CO1,CO3	Istisqā': Ascites Adventure - Game-Based Diagnosis and Management
35.3	CO1,CO3	Tashaḥḥum al-Kabid (Fatty Liver Disease / FLD)
36.1	CO1,CO3,CO4	Suqoot al-Kulya (Renal Failure): Acute Renal Failure / Acute Kidney Injury
36.2	CO1,CO3,CO4	Suqoot al-Kulya (Renal Failure): Chronic Renal Failure / Chronic Kidney Disease
37.1	CO1,CO3	Ḥurqa al-Bawl/ Ta'dia al-Majārī-i-Bawl (Urinary Tract Infection / UTI)
37.2	CO1,CO3	Bawl al-Dam (Haematuria)
37.3	CO1,CO3,CO4	Salas al-Bawl wa Taqtīr al-Bawl (Urinary Incontinence and dribbling urine / Post-micturition dribbling / PMD)
37.4	CO1,CO3,CO4	Kathra al-Bawl wa Qilla al-Bawl (Polyuria and Oliguria)
38.1	CO1,CO3,CO4	Ḍu'f al-Bāh (sexual debility) - Fertility Quest: Unani Perspectives on Male Infertility
39.1	CO1,CO3,CO5	Marad ān'flūynza Vayrūsī (Influenza virus disease)
39.2	CO1,CO3,CO5	Marad Sārīs (SARS / Severe Acute Respiratory Syndrome)
39.3	CO1,CO3,CO5	Marad Kūrūna Vayrūsī (Coronavirus disease)
39.4	CO1,CO3,CO5	Dā'al-lybtūsbirūsīs wa Ḥummā-Q (Leptospirosis / Weil's disease and Q-Fever)
40.1	CO1,CO3	Iltihāb al-Mafāṣil (Inflammatory Arthritis): Waja' al-Mafāṣil Ḥudāri (Rheumatoid Arthritis), Niqris (Gout), and Iltihāb al-Faqarāt al-tasalubī (Ankylosing Spondylitis)
40.2	CO1,CO3,CO4	Waja' al-Mafāṣil (Osteoarthritis)

40.3	CO1,CO3,CO4	Waja' al-Mafāṣil Muta'dī (Infective Arthritis): Waja' al-Mafāṣil 'Ufūnī (Septic Arthritis), Waja' al-Mafāṣil Vayrūsī (Viral Arthritis), Iltihāb al-'Aẓm wa al-naqī (Osteomyelitis), and Waja' al-Mafāṣil Sillī (Tubercular Arthritis)
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Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Sr No	CO No	Practical Activity details
1.1	C02,CO6	Demonstration of Empathy while treating Sahar (Insomnia)
1.2	C02,CO6	Counselling a Patient with Idṭarābāt al-Akt'ābī (Depressive Disorders)
1.3	CO3	Mental Status Examination (MSE)
2.1	CO3	Interpretation of Hormonal Assay Results
2.2	CO1	Clinical Assessment of Amrāḍ-i-Ghudud-i-Daraqiyya (Thyroid Disorders)
3.1	CO3	Interpretation of Lipid Profile Results
3.2	CO3	Assessment of the risk of Siman Mufriṭ (Obesity)
3.3	CO3	Assessment and Management of Sleep Apnea Syndrome
3.4	CO3	Interpretation of Blood Glucose Laboratory Tests
3.5	CO3	Diagnosis of Hyperglycemic Hyperosmolar State (HHS)
3.6	CO1,CO5	Dietary Management for Patients with Diabetes, Hyperlipidemia, and Obesity Based on Unani Medicine Principles
5.1	CO3	Interpretation of Diagnostic Tests of Ṣudā' (Headache)
6.1	CO3	Clinical Examination of Sarsām (Meningitis) and Waram-i-Dimāgh (Encephalitis)
7.1	CO3	Clinical Examination of Laqwa (Facial Palsy) case
7.2	CO3	Clinical Examination of Fālij (Hemiplegia) case
8.1	CO3	Interpretation of diagnostic tests for Sakta (Stroke)
8.2	CO3	Clinical assessment of a patient presenting with Duwār (Vertigo)
8.3	CO3	Vestibular function tests for Duwār (Vertigo)

9.1	C02,CO6	Ethical considerations in the management of Coma
9.2	CO3	Diagnostic Interpretation in Coma
11.1	C02,CO6	Empathetic communication with patients of Şar' (Epilepsy)
11.2	CO3	Interpretation of Lab reports of Şar' (Epilepsy)
11.3	CO3	Clinical Examination of Parkinson's Case
12.1	CO3	Interpretation of diagnostic tests for Sadr (Orthostatic Hypotension)
12.2	CO3	Clinical examination of Sadr (Orthostatic Hypotension) case
13.1	CO3	Assessment of pain severity in Waja' al-A'şāb (Neuralgia)
15.1	CO3	Fever Charting and Interpretation
15.2	CO3	Diagnostic and Management Approach to Undiagnosed Fevers
15.3	CO3	Differential Diagnosis of Common Fever Syndromes
15.4	CO3	Nabz examination in febrile cases.
15.5	C02	Empathetic Fever Management
15.6	CO3	Laboratory Interpretation of Fever
15.7	CO1	Dietary Plans for Patients with Fever
15.8	C02	Patient Education Materials for Effective Fever Management
17.1	CO3	Correct technique to perform spirometry and interpretation of Pulmonary function test
17.2	CO3	Correct technique to perform nebulisation
17.3	C02,CO3,CO6	Case presentation of Dā Insidād al Ri'a (Obstructive Pulmonary Disease)
17.4	C02,CO5	Counselling a Patient with Dā Insidād al Ri'a (obstructive pulmonary disease) for smoking cessation.
18.1	CO3	Interpretation of CBC&ABG report and Chest X ray PA view in respiratory diseases
18.2	CO3	Interpret sputum gram stain and AFB

18.3	CO2	Communicate with Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System) patients and family in an empathetic manner
18.4	CO2,CO3,CO6	Case presentation of patients with Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System)
20.1	CO3	Interpretation of USG, CT & MRI thorax films and reports
22.1	CO2,CO3,CO6	Case presentation of Amrāḡ-i-Janb (Diseases of Pleura)
23.1	CO3	Examination of Nabz in patients presenting with Khafaqān (Palpitation)
23.2	CO3	Diagnostic approach to Suqūṡ Qalb (Heart Failure)
24.1	CO3	Diagnostic work up of patient having Iflās-i-Qalb (Ischaemic Heart Disease)
25.1	CO3	Case presentation of Itihābe Aḡal al-Qalb (Myocarditis)
26.1	CO3	clinical presentation of Itihābe Baṡan al-Qalb (Infective Endocarditis)
26.2	CO1	Treatment plan for Dā' al-Qalb Hudāri (Rheumatic Heart disease)
26.3	CO3	Clinical presentation of Dā' al-Qalb Hudāri (Rheumatic Heart disease)
26.4	CO3	Videographic representation of valvuloplasty, valvotomy, coronary revascularization, and cardiac transplantation.
27.1	CO3	Diagnosis of Sur'a al-Qalb (Tachycardia)
27.2	CO3	Diagnostic evaluation of Buṡū' al-Qalb (Bradycardia)
27.3	CO3	Diagnostic approach to Manuate Qalb(Heart Block)
28.1	CO3	Case Study of Itihābe Ghilāf –ul-Qalb (Pericarditis)
29.1	CO3,CO6	Diagnostic Approach to patient with ḡaghṡ al-Dam Qawī (Hypertension)
29.2	CO2,CO5	Counselling patients with ḡaghṡ al-Dam Qawī (Hypertension) on lifestyle modification.
30.1	CO3	Investigations to find out cause of Faq'r al-Dam anemia
30.2	CO2,CO5	Counselling patients on dietary modifications to manage and prevent Faq'r al-Dam (Anemia)
30.3	CO3	Interpretation of Complete Blood Count (CBC) and Differential Count results in suspected leukaemia
31.1	CO6	Professionalism and Empathy in Patient Interaction

31.2	CO6	Professional Boundaries and Conflict of Interest Management
31.3	CO6	Clinical Decision-Making
31.4	C02,CO6	Shared Decision-Making and Patient Autonomy in Clinical Practice
31.5	CO6	Upholding Confidentiality and Patient Privacy in Clinical Settings
31.6	C02,CO6	Informed Consent in Clinical Practice
31.7	CO6	Ethics related to issue of Different Medical Certificates
31.8	CO6	Ethical and Accurate Reporting of Medicolegal Cases
32.1	C02,CO3	History taking and physical examination for diseases of the oesophagus
32.2	CO3	Diagnostic tests Interpretation for Diseases of the Oesophagus
32.3	CO1	Nuskha Navesī
32.4	CO5,CO6	Patient Education on Chronic Oesophageal Diseases
33.1	CO3	Unani diagnostic methods for Amrāḍ-i-Mi'da (Diseases of the Stomach)
33.2	C02,CO3	History-Taking and Per-abdomen Examination for Stomach Diseases
33.3	CO3	Diagnostic tests interpretation for Diseases of the stomach
33.4	CO1	Nuskha Navesī
33.5	CO5,CO6	Patient Education on Chronic Diseases of the Stomach
33.6	CO1,CO4	Building Competency in Stomach Disease Procedures
33.7	CO5,CO6	Professionalism and Ethical Decision-Making in Stomach Disorders
34.1	C02,CO3	History-Taking and Physical Examination for Intestinal Diseases
34.2	CO3	Diagnostic tests interpretation for Diseases of the Intestines
34.3	CO1	Nuskha Navesī
34.4	CO5,CO6	Patient Education on Chronic Intestinal Diseases
35.1	CO3	Unani diagnostic methods for Amrāḍ-i-Kabid (Diseases of the liver)
35.2	C02,CO3	History-Taking and Examination for Diseases of the Liver

35.3	CO3	Diagnostic Tests Interpretation for Diseases of the Liver
35.4	CO1	Nuskha Navesī
35.5	CO5,CO6	Patient Education on Diseases of the Liver
35.6	CO1,CO4	Building Competency in Procedures of Diseases of the Liver
36.1	C02,CO3	History-Taking and Examination for Diseases of the Kidney
36.2	CO3	Diagnostic tests Interpretation for Diseases of the Kidney
36.3	CO1	Nuskha Navesī
36.4	CO5,CO6	Patient Education on Diseases of the kidney
37.1	C02,CO3	History-Taking and Examination for Diseases of the Urinary bladder
37.2	CO3	Diagnostic tests interpretation for Diseases of the Urinary bladder
37.3	CO1	Nuskha Navesī
37.4	CO5,CO6	Patient Education on Diseases of the Urinary bladder
37.5	CO1,CO4	Procedures relevant to Diseases of the Urinary Bladder
38.1	C02,CO3	History-Taking and Examination for Male Genital Disorders
38.2	CO3	Diagnostic Tests Interpretation for Male Genital Disorders
38.3	CO1	Nuskha Navesī
38.4	CO5,CO6	Patient Education on Male Genital Disorders
39.1	C02,CO3	History-Taking and Examination for Infectious Diseases
39.2	CO3	Diagnostic tests interpretation for infectious diseases
39.3	CO1	Nuskha Navesī
39.4	CO5,CO6	Patient Education on infectious diseases
39.5	CO5	Public Health Principles
39.6	CO1,CO3	Laboratory skills
40.1	C02,CO3	History-Taking and Examination for Musculoskeletal disorders

40.2	CO3	Diagnostic tests interpretation for Musculoskeletal disorders
40.3	CO1	Nuskha Navesī
40.4	CO5,CO6	Patient Education on Musculoskeletal Disorders

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 (150)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
UNIUG-MOA	3	300	100	30	-	20	150	450

6 B : Scheme of Assessment (formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.
****University Examination shall be on entire syllabus**

6 C : Calculation Method for Internal assessment Marks

Term	Periodical Assessment*				Term Test**	Term Assessment	
	A	B	C	D	E	F	G
1 (20)	2 (20)	3 (20)	Average (A+B+C/3) (20)	Term Test (MCQ+SAQ+LAQ and Practical) (Converted to 20)	Sub Total	Term Assessment	
First						D+E	D+E /2
Second						D+E	D+E /2
Third					NIL		D
Final IA	Average of Three Term Assessment Marks as Shown in 'G' Column						
	* Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D. Convert it to 20 marks. ** Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 20 Marks.						

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

Exam type	Paper 1	Paper 2	Paper 3
PA1	Topic No 1	Topic No 16, 17 & 18	Topic No 32
PA 2	Topic No 2	Topic No 19 & 20	Topic No 33
PA 3	Topic No 3 & 4	Topic No 21 & 22	Topic No 34
TT 1	Topic No 1 to 4	Topic No 16 to 22	Topic No 32 to 34
PA 4	Topic No 5, 6, 7, 8	Topic No 23 & 24	Topic No 35
PA 5	Topic No 9, 10, 11, 12	Topic No 25 & 26	Topic No 36
PA 6	Topic No 12,13,14	Topic No 27 & 28	Topic No 37,38
TT 2	Topic No 5 to 14	Topic No 23 to 28	Topic No 35 to 38
PA 7	Topic No 15.1, 15.2, 15.3	Topic No 29	Topic No 39 (1-9)
PA 8	Topic No 15.4, 15.5	Topic No 30	Topic No 39 (10-18)
PA 9	Topic No 15.6, 15.7, 15.8	Topic No 31	Topic No 40

6 E : Question Paper Pattern

III PROFESSIONAL BUMS EXAMINATIONS

PAPER-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II & III

6 F : Distribution of theory examination

Paper 1 (Moalajat (Medicine) Paper I)					
List of Topics	Term	Marks	MCQ	SAQ	LAQ
1 Amrāḍ-i-Nafsānī (Psychiatric Disorders)	1	24	Yes	Yes	Yes
2 Amrāḍ-i-Ghudud lā Qanātī (Endocrine Disorders)	1		Yes	Yes	Yes
3 Amrāḍ-i-Naqṣ-i-Istihāla (Metabolic Disorders)	1		Yes	Yes	Yes
4 Amrāḍ-i-Tūrāth (Genetic Disorders)	1	6	Yes	Yes	No
5 Nervous System Part 1: 'Sudā' (Headache)	2	11	Yes	No	Yes
6 Nervous System Part 2: 'Adwī al-Jahāz al-'Aṣbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis)	2	23	Yes	Yes	Yes
7 Nervous System Part 3: 'Idṭarābāt al-'Aṣbīyya 'Aḍliyya (Neuromuscular Disorders)	2		Yes	Yes	Yes
8 Nervous System Part 4: 'Idṭarābāt Aw'iyya al-Damawīyya al-Dimāghīyya (Cerebrovascular Disorders)	2		Yes	Yes	Yes
9 Nervous System Part 5: 'Ḥālāt al-Wa'iyya al-Mutaghiyyra (Altered state of Consciousness)	2		Yes	Yes	Yes

10 Nervous System Part 6: اضطرابات المعرفة Idṭarābāt al-Ma'rfiyya (Cognitive Disorders)	2		Yes	Yes	Yes
11 Nervous System Part 7: اضطرابات الصرع والحركة Idṭarābāt al-Ṣar' wa Ḥaraka (Epileptic and Movement Disorders)	2		Yes	Yes	Yes
12 Nervous System Part 8: اضطرابات الجهاز العصبي اللاإرادي Airādī (Autonomic Nervous System Disorders)	2	6	Yes	Yes	No
13 Nervous System Part 9: اضطرابات الجهاز العصبي المحيطي Muḥṭī (Peripheral Nervous System Disorders)	2		Yes	Yes	No
14 Nervous System Part 10: ضعف دماغ Du'f-i-Dimāgh (Cerebral Asthenia)	2		Yes	Yes	No
15 حميات Hummayāt (Fevers)	3	30	Yes	Yes	Yes
Total Marks		100			
Paper 2 (Moalajat (Medicine) Paper II)					
List of Topics	Term	Marks	MCQ	SAQ	LAQ
16 Respiratory System Part 1: نزله وسعال Nazla wa Su'āl (Catarrh and Cough)	1	16	Yes	Yes	No
17 Respiratory System Part 2: داء انسداد الرية Dā Insidād al Ri'a (Obstructive Pulmonary Disease)	1		Yes	Yes	Yes
18 Respiratory System Part 3: نظام تنفسه Ta'diya Niḡām-i-Tanaffus (Infections of Respiratory System)	1		Yes	Yes	Yes
19 Respiratory System Part 4: سندرم حاد تنفسي وسترس سندرم حاد Ḥād (Acute Respiratory Distress Syndrome)	1		Yes	Yes	No
20 Respiratory System Part 5: سرطان شعبه الرية Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma)	1	7	Yes	Yes	No
21 Respiratory System Part 6: داء الرية معاشي Dā' al-Ri'a Ma'a'shī (Occupational Lung Diseases)	1		Yes	Yes	No
22 Respiratory System Part 7: امراض جنب Amrād-i-Janb (Diseases of Pleura)	1	7	Yes	Yes	No
23 Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases	2	17	Yes	Yes	Yes
24 Cardiovascular System Part 2: افلاس قلب Iflās-i-Qalb (Ischaemic Heart Disease)	2		Yes	Yes	Yes
25 Cardiovascular System Part 3: امراض عضيه القلب Amrād-i-'Aḡala al-Qalb (Diseases of Myocardium)	2	23	Yes	Yes	Yes
26 Cardiovascular System Part 4: امراض صمامات قلب Amrād-i-Ṣamāmāt-i-Qalb (Diseases of Heart Valves)	2		Yes	Yes	Yes

27 Cardiovascular System Part 5: امراض رقتار قلب غير منظم Amrāḍ-ī-Raftar-ī-Qalb Ghayr Munazim(Cardiac Arrhythmias)	2		Yes	Yes	No
28 Cardiovascular System Part 6: امراض غشاء القلب Amrāḍ-ī-Ghishā'-ī-Qalb (Diseases of Pericardium)	2		Yes	Yes	Yes
29 امراض دوران خون Amrāḍ-ī-Dawrān-ī-Khūn (Circulatory disorders)	3	15	Yes	No	Yes
30 أمراض الجهاز الدموي والمفاوي Amrāḍ-ī-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System)	3	15	Yes	Yes	No
31 طبي اخلاقيات -Ṭibbi Akhlaqiyāt (Medical Ethics)	3	0	No	No	No
Total Marks		100			
Paper 3 (Moalajat (Medicine) Paper III)					
List of Topics	Term	Marks	MCQ	SAQ	LAQ
32 امراض مری Amrāḍ-ī-Marī (Diseases of the Oesophagus)	1	30	Yes	Yes	No
33 امراض معده Amrāḍ-ī-Mi'da (Diseases of the Stomach)	1		Yes	Yes	Yes
34 امراض امعاء Amrāḍ-ī-Am'ā' (Diseases of the Intestines)	1		Yes	Yes	Yes
35 امراض كبد Amrāḍ-ī-Kabid (Diseases of the Liver)	2	45	Yes	Yes	Yes
36 امراض كليہ Amrāḍ-ī-kulya (Diseases of the Kidney)	2		Yes	Yes	Yes
37 امراض مثانة Amrāḍ-ī-Mathāna (Diseases of the Bladder)	2		Yes	Yes	No
38 امراض اعضاء تناسلية مردانه Amrāḍ-ī-Aza'-ī-Tānāsulya Mardana (Male Genital Disorders)	2		Yes	Yes	Yes
39 امراض متعدی Amrāḍ-ī-Muta'di (Infectious Diseases)	3	25	Yes	Yes	Yes
40 امراض مفاصل وعظام Amrāḍ-ī-Mafāṣil-o-'Izām (Musculoskeletal Disorders)	3		Yes	Yes	Yes
Total Marks		100			
Grand Total		300			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. The maximum marks for one question paper shall be 100.
3. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
4. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
5. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
6. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
7. Each 100-mark question paper shall contain:
 - 20 MCQs
 - 8 SAQs
 - 4 LAQs
8. MCQs:
 - Majority shall be drawn from the Must to Know part of the syllabus.
 - Questions from the Desirable to Know part of syllabus shall not exceed 3.
 - Questions from the Nice to Know part of syllabus shall not exceed 2.
9. SAQs:
 - Majority shall be drawn from the Must to Know part of the syllabus.
 - Questions from the Desirable to Know part of syllabus shall not exceed 1.
 - No questions shall be drawn from the Nice to Know part of syllabus.
 - SAQs shall assess understanding, application, and analysis, rather than simple recall.
10. LAQs:
 - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
 - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
 - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.
11. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
12. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

Demo Blueprint for Illustration. Blue printing should be done based on Instructions for Question paper setting and using 6 F table.

Paper No: 1 (Moalajat (Medicine) Paper I)		
Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions</p> <p>20 Questions</p> <p>1 mark each</p> <p>All compulsory</p>	<ol style="list-style-type: none"> 1. Amrāḍ-i-Nafsānī (Psychiatric Disorders) 2. Amrāḍ-i-Nafsānī (Psychiatric Disorders) 3. Amrāḍ-i-Nafsānī (Psychiatric Disorders) 4. Amrāḍ-i-Ghudud Iā Qanātī (Endocrine Disorders) 5. Amrāḍ-i-Ghudud Iā Qanātī (Endocrine Disorders) 6. Amrāḍ-i-Ghudud Iā Qanātī (Endocrine Disorders) 7. Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) 8. Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) 9. Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) 10. Amrāḍ-i-Tūrāth (Genetic Disorders) 11. Nervous System Part 1: صداع Şudā' (Headache) 12. Nervous System Part 3: اضطرابات العصبية عضلية dḡtarābāt al-'Aşbīyya 'Aḍliyya (Neuromuscular Disorders) / Nervous System Part 2: عدوى الجهاز العصبي المركزي Adwī al-Jahāz al-'Aşbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis) 13. Nervous System Part 5: حالات الوعي المتغيرة Ḥālāt al-Wa'iyya al-Mutaghiyya (Altered state of Consciousness) / Nervous System Part 4: اضطرابات أوعية الدموية الدماغية dḡtarābāt Aw'iya al-Damawiyya al-Dimāghiyya (Cerebrovascular Disorders) 14. Nervous System Part 7: اضطرابات الصرع والحركة dḡtarābāt al-Şar' wa Ḥaraka (Epileptic and Movement Disorders) / Nervous System Part 6: اضطرابات المعرفة dḡtarābāt al-Ma'rfiyya (Cognitive Disorders) 15. Nervous System Part 10: ضعف دماغ Du'f-i-Dimāgh (Cerebral Asthenia) / Nervous System Part 9: اضطرابات الجهاز العصبي المحيطي dḡtarābāt al-Jahāz al-'Aşbī -al Muḥṭī (Peripheral Nervous System Disorders) / Nervous System Part 8: اضطرابات الجهاز العصبي اللاإرادي dḡtarābāt al-Jahāz al-'Aşbī -al Airādī (Autonomic Nervous System Disorders) 16. حميات Ḥummayāt (Fever) 17. حميات Ḥummayāt (Fever)

		<p>18. حميات Hummayāt (Fevers)</p> <p>19. حميات Hummayāt (Fevers)</p> <p>20. حميات Hummayāt (Fevers)</p>
Q2	<p>Short answer Questions</p> <p>Eight Questions</p> <p>5 Marks Each</p> <p>All compulsory</p>	<p>1. Amrāḍ-i-Naqṣ-i-Istihāla (Metabolic Disorders) / Amrāḍ-i-Ghudud lā Qanātī (Endocrine Disorders) / Amrāḍ-i-Nafsānī (Psychiatric Disorders)</p> <p>2. Amrāḍ-i-Tūrāth (Genetic Disorders)</p> <p>3. Nervous System Part 7: اضطرابات الصرع والحركة: dṭarābāt al-Ṣar' wa Ḥaraka (Epileptic and Movement Disorders) / Nervous System Part 6: اضطرابات المعرفة: dṭarābāt al-Ma'rfiyya (Cognitive Disorders) / Nervous System Part 5: حالات الوعي المتغيرة: Ḥālāt al-Wa'iyya al-Mutaghiyya (Altered state of Consciousness) / Nervous System Part 4: اضطرابات أوعية: dṭarābāt Aw'iya al-Damawiyya al-Dimāghiyya (Cerebrovascular Disorders) / Nervous System Part 3: اضطرابات العصبية عضلية: dṭarābāt al-'Aṣbīyya 'Aḍliyya (Neuromuscular Disorders) / Nervous System Part 2: عدوى الجهاز العصبي المركزي: Adwī al-Jahāz al-'Aṣbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis)</p> <p>4. Nervous System Part 7: اضطرابات الصرع والحركة: dṭarābāt al-Ṣar' wa Ḥaraka (Epileptic and Movement Disorders) / Nervous System Part 6: اضطرابات المعرفة: dṭarābāt al-Ma'rfiyya (Cognitive Disorders) / Nervous System Part 5: حالات الوعي المتغيرة: Ḥālāt al-Wa'iyya al-Mutaghiyya (Altered state of Consciousness) / Nervous System Part 4: اضطرابات أوعية: dṭarābāt Aw'iya al-Damawiyya al-Dimāghiyya (Cerebrovascular Disorders) / Nervous System Part 3: اضطرابات العصبية عضلية: dṭarābāt al-'Aṣbīyya 'Aḍliyya (Neuromuscular Disorders) / Nervous System Part 2: عدوى الجهاز العصبي المركزي: Adwī al-Jahāz al-'Aṣbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis)</p> <p>5. Nervous System Part 10: ضعف دماغ: Du'f-i-Dimāgh (Cerebral Asthenia) / Nervous System Part 9: اضطرابات الجهاز العصبي المحيطي: dṭarābāt al-Jahāz al-'Aṣbī -al Muḥṭī (Peripheral Nervous System Disorders) / Nervous System Part 8: اضطرابات الجهاز العصبي اللاإرادي: dṭarābāt al-Jahāz al-'Aṣbī -al Airādī (Autonomic Nervous System Disorders)</p> <p>6. حميات Hummayāt (Fevers)</p> <p>7. حميات Hummayāt (Fevers)</p>

		8. حميات Hummayāt (Fevers)
Q3	<p>Long answer Questions</p> <p>Four Questions</p> <p>10 marks each</p> <p>All compulsory</p>	<p>1. أمراض غدد لا قناتي Amrāḍ-i-Naqṣ-i-Istiḥāla (Metabolic Disorders) / أمراض غدد لا قناتي Amrāḍ-i-Ghudud lā Qanātī (Endocrine Disorders) / أمراض نفساني Amrāḍ-i-Nafsānī (Psychiatric Disorders)</p> <p>2. Nervous System Part 1: صداع Šudā' (Headache)</p> <p>3. Nervous System Part 7: اضطرابات الصرع والحركة Idṭarābāt al-Šar' wa Ḥaraka (Epileptic and Movement Disorders) / Nervous System Part 6: اضطرابات المعرفة Idṭarābāt al-Ma'rifiyya (Cognitive Disorders) / Nervous System Part 5: حالات الوعي المتغيرة Ḥālāt al-Wa'iyya al-Mutaghiyya (Altered state of Consciousness) / Nervous System Part 4: اضطرابات أوعية الدماغية Idṭarābāt Aw'iya al-Damawiyya al-Dimāghiyya (Cerebrovascular Disorders) / Nervous System Part 3: اضطرابات العصبية العضلية Idṭarābāt al-'Aṣbīyya 'Aḍliyya (Neuromuscular Disorders) / Nervous System Part 2: عدوى الجهاز العصبي المركزي Adwī al-Jahāz al-'Aṣbī al-Markazī (Infections of the Central Nervous System: Focus on Meningitis and Encephalitis)</p> <p>4. حميات Hummayāt (Fevers)</p>

Paper No: 2 (Moalajat (Medicine) Paper II)

Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions</p> <p>20 Questions</p> <p>1 mark each</p> <p>All compulsory</p>	<p>1. Respiratory System Part 4: سندرم حاد Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome) / Respiratory System Part 3: تعديبه نظام تنفس Ta'diya Niḗām-i-Tanaffus (Infections of Respiratory System) / Respiratory System Part 2: داء انسداد الرية Dā Insidād al Ri'a (Obstructive Pulmonary Disease) / Respiratory System Part 1: نزله وسعال Nazla wa Su'āl (Catarrh and Cough)</p> <p>2. Respiratory System Part 5: سرطان شعبته الرية Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma)</p> <p>3. Respiratory System Part 6: داء الرية معاشي Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases)</p> <p>4. Respiratory System Part 7: أمراض جنب Amrāḍ-i-Janb (Diseases of Pleura)</p> <p>5. Respiratory System Part 7: أمراض جنب Amrāḍ-i-Janb (Diseases of Pleura)</p> <p>6. Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases</p>

		<ol style="list-style-type: none"> 7. Cardiovascular System Part 2: افلاس قلب Ifflās-i-Qalb (Ischaemic Heart Disease) 8. Cardiovascular System Part 4: امراض صمامات قلب Amrāḍ-i-Samāmāt-i-Qalb (Diseases of Heart Valves) / Cardiovascular System Part 3: أمراض عضلة القلب Amrāḍ-i-'Aḍala al-Qalb (Diseases of Myocardium) 9. Cardiovascular System Part 5: امراض رفتار قلب غير منظم Amrāḍ-i-Raftar-i-Qalb Ghayr Munazim (Cardiac Arrhythmias) 10. Cardiovascular System Part 6: امراض غشاء القلب Amrāḍ-i-Ghishā'-i-Qalb (Diseases of Pericardium) 11. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) 12. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) 13. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) 14. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) 15. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders) 16. أمراض الجهاز الدموي والمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System) 17. أمراض الجهاز الدموي والمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System) 18. أمراض الجهاز الدموي والمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System) 19. أمراض الجهاز الدموي والمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System) 20. أمراض الجهاز الدموي والمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System)
Q2	<p>Short answer Questions Eight Questions 5 Marks Each All compulsory</p>	<ol style="list-style-type: none"> 1. Respiratory System Part 4: تنفسى دسترس سندرم حاد Tanaffusī Dastaras Sindram Ḥād (Acute Respiratory Distress Syndrome) / Respiratory System Part 3: تعديہ نظام تنفس Ta'diyā Niḏām-i-Tanaffus (Infections of Respiratory System) / Respiratory System Part 2: داء انسداد الریه Dā Insidād al Ri'a (Obstructive Pulmonary Disease) / Respiratory System Part 1: نزله وسعال Nazla wa Su'āl (Catarrh and Cough) 2. Respiratory System Part 6: داء الریه معاشی Dā' al-Ri'a Ma'āshī (Occupational Lung Diseases) / Respiratory System Part 5: سرطان شعبر الریه Saraṭān Shu'ab al-Ri'a (Bronchial Carcinoma) 3. Respiratory System Part 7: امراض جنب Amrāḍ-i-Janb (Diseases of Pleura)

		<p>4. Cardiovascular System Part 2: افلاس قلب Iflās-i-Qalb (Ischaemic Heart Disease) / Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases</p> <p>5. Cardiovascular System Part 4: امراض صمامات قلب Amrāḍ-i-Ṣamāmāt-i-Qalb (Diseases of Heart Valves) / Cardiovascular System Part 3: أمراض عضلة القلب Amrāḍ-i-ʿAḍala al-Qalb (Diseases of Myocardium)</p> <p>6. Cardiovascular System Part 6: امراض غشاء القلب Amrāḍ-i-Ghishāʾ-i-Qalb (Diseases of Pericardium) / Cardiovascular System Part 5: امراض رفتار قلب غير منظم Amrāḍ-i-Raftar-i-Qalb Ghayr Munaẓim (Cardiac Arrhythmias)</p> <p>7. أمراض الجهاز الدموي واللمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System)</p> <p>8. أمراض الجهاز الدموي واللمفاوي Amrāḍ-i-Jāhāz Dam wa Limfāwiyya (Diseases of Haemopoetic and Lymphatic System)</p>
Q3	<p>Long answer Questions</p> <p>Four Questions</p> <p>10 marks each</p> <p>All compulsory</p>	<p>1. Respiratory System Part 3: تعديبه نظام تنفس Ta'diya Niẓām-i-Tanaffus (Infections of Respiratory System) / Respiratory System Part 2: داء انسداد الرية Dā Insidād al Ri'a (Obstructive Pulmonary Disease)</p> <p>2. Cardiovascular System Part 2: افلاس قلب Iflās-i-Qalb (Ischaemic Heart Disease) / Cardiovascular System Part 1: Presenting Problems in Cardiovascular diseases</p> <p>3. Cardiovascular System Part 6: امراض غشاء القلب Amrāḍ-i-Ghishāʾ-i-Qalb (Diseases of Pericardium) / Cardiovascular System Part 4: امراض صمامات قلب Amrāḍ-i-Ṣamāmāt-i-Qalb (Diseases of Heart Valves) / Cardiovascular System Part 3: أمراض عضلة القلب Amrāḍ-i-ʿAḍala al-Qalb (Diseases of Myocardium)</p> <p>4. امراض دوران خون Amrāḍ-i-Dawrān-i-Khūn (Circulatory disorders)</p>
Paper No: 3 (Moalajat (Medicine) Paper III)		
Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions</p> <p>20 Questions</p> <p>1 mark each</p>	<p>1. امراض مری Amrāḍ-i-Marī (Diseases of the Oesophagus)</p> <p>2. امراض معدة Amrāḍ-i-Mi'da (Diseases of the Stomach)</p> <p>3. امراض معدة Amrāḍ-i-Mi'da (Diseases of the Stomach)</p> <p>4. امراض امعاء Amrāḍ-i-Am'ā' (Diseases of the Intestines)</p> <p>5. امراض امعاء Amrāḍ-i-Am'ā' (Diseases of the Intestines)</p>

	All compulsory	<p>6. Amrāḍ-i-Kabid (Diseases of the Liver) / امراض کبد</p> <p>7. Amrāḍ-i-Kabid (Diseases of the Liver) / امراض کبد</p> <p>8. Amrāḍ-i-Kabid (Diseases of the Liver) / امراض کبد</p> <p>9. Amrāḍ-i-kulya (Diseases of the Kidney) / امراض کلیہ</p> <p>10. Amrāḍ-i-kulya (Diseases of the Kidney) / امراض کلیہ</p> <p>11. Amrāḍ-i-kulya (Diseases of the Kidney) / امراض کلیہ</p> <p>12. Amrāḍ-i-Mathāna (Diseases of the Bladder) / امراض مثانہ</p> <p>13. Amrāḍ-i-Mathāna (Diseases of the Bladder) / امراض مثانہ</p> <p>14. Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders) / امراض تناسلیہ مردانہ</p> <p>15. Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders) / امراض تناسلیہ مردانہ</p> <p>16. Amrāḍ-i-Muta'di (Infectious Diseases) / امراض متعدی</p> <p>17. Amrāḍ-i-Muta'di (Infectious Diseases) / امراض متعدی</p> <p>18. Amrāḍ-i-Muta'di (Infectious Diseases) / امراض متعدی</p> <p>19. Amrāḍ-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders) / امراض مفاصل و عظام</p> <p>20. Amrāḍ-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders) / امراض مفاصل و عظام</p>
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory	<p>1. Amrāḍ-i-Mi'da (Diseases of the Stomach) / امراض معدہ / Amrāḍ-i-Am'ā' (Diseases of the Intestines) / امراض امعاء / Amrāḍ-i-Marī (Diseases of the Oesophagus) / امراض مری</p> <p>2. Amrāḍ-i-Mi'da (Diseases of the Stomach) / امراض معدہ / Amrāḍ-i-Am'ā' (Diseases of the Intestines) / امراض امعاء / Amrāḍ-i-Marī (Diseases of the Oesophagus) / امراض مری</p> <p>3. Amrāḍ-i-Mi'da (Diseases of the Stomach) / امراض معدہ / Amrāḍ-i-Am'ā' (Diseases of the Intestines) / امراض امعاء / Amrāḍ-i-Marī (Diseases of the Oesophagus) / امراض مری</p> <p>4. Amrāḍ-i-kulya (Diseases of the Kidney) / امراض کلیہ / Amrāḍ-i-Kabid (Diseases of the Liver) / امراض کبد</p> <p>5. Amrāḍ-i-kulya (Diseases of the Kidney) / امراض کلیہ / Amrāḍ-i-Kabid (Diseases of the Liver) / امراض کبد</p> <p>6. Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders) / امراض / Amrāḍ-i-Mathāna (Diseases of the Bladder) / امراض مثانہ</p> <p>7. Amrāḍ-i-Muta'di (Infectious Diseases) / امراض متعدی / Amrāḍ-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders) / امراض مفاصل و عظام</p> <p>8. Amrāḍ-i-Muta'di (Infectious Diseases) / امراض متعدی / Amrāḍ-i-Mafāṣil-o-'Izām (Musculoskeletal Disorders) / امراض مفاصل و عظام</p>

Q3	Long answer Questions	<ol style="list-style-type: none"> 1. أمراض امعاء Amrāḍ-i-Am'ā' (Diseases of the Intestines) / أمراض معدة Amrāḍ-i-Mi'da (Diseases of the Stomach) 2. أمراض كلية Amrāḍ-i-kulya (Diseases of the Kidney) / أمراض كبدة Amrāḍ-i-Kabid (Diseases of the Liver) 3. أمراض مفاصل وعظام Amrāḍ-i-Mafāṣil-o-'Iḏām (Musculoskeletal Disorders) / أمراض اعضاء تناسلية مردانه Amrāḍ-i-Aza'-i-Tānāsulya Mardana (Male Genital Disorders) 4. أمراض متعددي Amrāḍ-i-Muta'di (Infectious Diseases)
	<p>Four Questions</p> <p>10 marks each</p> <p>All compulsory</p>	

6 H : Distribution of Practical Exam

S.No	Head	Marks
1	<p>Long Cases: Long case assessments evaluate students' key clinical competencies. The assessment covers history-taking, clinical examination, diagnostic reasoning, investigation planning, management outline, and case presentation skills.</p> <p>Suggested Topics are:</p> <ul style="list-style-type: none"> -Diseases of the Respiratory system -Diseases of the Digestive systems -Diseases of the Nervous system -Diseases of the Cardiovascular system -Diseases of the Urogenital system -Diseases of the Musculoskeletal system -Metabolic Diseases 	60
2	<p>Lab Reports and Imaging Interpretation: These assessments evaluates students' ability to analyze laboratory results and interpret diagnostic imaging to make informed clinical decisions. Emphasis is placed on accuracy, critical thinking, and correlating findings with clinical presentations. Lab reports, X-Ray films, etc are assigned along with brief clinical scenarios to students for assesment.</p> <p>Some suggested topics are:</p>	10

<ol style="list-style-type: none"> 1. Complete Blood Count (CBC) <ul style="list-style-type: none"> - Interpretation of anemia types, leukocytosis, leukopenia, and thrombocytopenia. 2. Liver Function Tests (LFT): <ul style="list-style-type: none"> - Patterns of liver injury, synthetic function (albumin, INR), and jaundice evaluation. 3. Renal Function Tests (RFT): <ul style="list-style-type: none"> - Acute vs. chronic kidney disease markers, Electrolyte imbalances, Acid-base disturbances. 4. Arterial Blood Gas (ABG) Analysis: <ul style="list-style-type: none"> - Acid-base disorders and Hypoxemia. 5. Thyroid Function Tests: <ul style="list-style-type: none"> - Hyperthyroidism vs. hypothyroidism patterns, Subclinical thyroid dysfunction, Interpretation in critical illness. 6. Lipid Profile: <ul style="list-style-type: none"> - Dyslipidemia and cardiovascular risk stratification. 7. Coagulation Profile: <ul style="list-style-type: none"> - Bleeding disorders and hypercoagulability markers. 8. Diabetes-Related Tests: <ul style="list-style-type: none"> - HbA1c, glucose trends, and hypoglycemia assessment. 9. Infection Markers:HbA1 <ul style="list-style-type: none"> - WBC patterns, ESR/CRP, and procalcitonin. 10. Urine Analysis: <ul style="list-style-type: none"> - Proteinuria, hematuria, Glycosuria, casts/crystals, Interpretation of urinary pH and specific gravity in acid-base balance. 11. Serum Calcium and Parathyroid Function: <ul style="list-style-type: none"> - Hypercalcemia and hypocalcemia evaluation. 12. Serological Tests: <ul style="list-style-type: none"> - Hepatitis markers, Autoantibodies in autoimmune diseases (e.g., ANA, anti-dsDNA), Dengue: NS1 antigen, Dengue IgM/IgG, Widal Test, Anti-streptolysin O (ASO) titer 13. Iron Studies: <ul style="list-style-type: none"> - Ferritin, transferrin saturation, and serum iron in anemia. 14. Cardiac Markers: <ul style="list-style-type: none"> - Troponin (ACS) and BNP (heart failure) and other markers. 15. Chest X-Ray: <ul style="list-style-type: none"> - Identification of signs related to Pneumonia, Tuberculosis, Congestive Heart Failure, etc 	
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	<p>16. Abdominal X-Ray: - Identification of signs related to Bowel Obstruction, Perforation, etc</p> <p>17. Skeletal X-Ray: - Identification of signs related to Fractures, Osteoarthritis, Rheumatoid Arthritis</p> <p>18. Spine X-Ray: - Identification of signs related to Spondylosis, Spinal TB (Pott's Disease).</p> <p>19. Pelvic X-Ray: - Identification of signs related to Hip Dysplasia or Fractures, Ankylosing Spondylitis.</p> <p>20. Extremity X-Ray: - Identification of signs related to Osteomyelitis, Soft Tissue Swelling.</p>	
3	<p>Nuskha Naveesi: This assessment evaluates students' ability to identify the patient's humoral imbalance, symptoms, and disease condition, and write appropriate Unani medicines with correct dosage and administration, recommend relevant dietary modifications to restore balance, and suggest practical lifestyle interventions. Additionally, students can be assessed on their ability to integrate modern medical knowledge with Unani principles for a holistic and safe approach. Students are assigned with a detailed clinical case scenario and tasked with designing a Nuskha (treatment plan).</p> <p>Suggested Topics are:</p> <ul style="list-style-type: none"> -Diseases of the Respiratory system -Diseases of the Digestive systems -Diseases of the Nervous system -Diseases of the Cardiovascular system -Diseases of the Urinary system -Diseases of the Musculoskeletal system -Metabolic disorders -Male genital disorders -Fevers 	10
4	<p>Logbook & practical records: This assessment focuses on students' ability to accurately document their clinical experiences, patient cases, and treatment strategies throughout the course. It evaluates how well students record presenting complaints, diagnosis, treatment plans, and follow-up observations, ensuring thorough analysis of humoral imbalances, symptoms, and appropriate therapeutic approaches. The logbook should also demonstrate the integration of Unani principles with modern medical knowledge wherever applicable, reflecting a holistic approach to patient care. Students are expected to present their</p>	10

	work, organised, and neatly, showcasing their ability to apply theory into practice while adhering to the principles of Unani medicine.	
5	Scenario based assessment for emergency medicine: It involves simulating real-life emergencies to evaluate students on their clinical skills, decision-making, teamwork and stress management in order to assess their preparedness for handling actual emergency situations.	10
6	Viva: It evaluates the student's understanding, application, and critical thinking in clinical and theoretical concepts. Students are expected to demonstrate their ability to articulate the rationale behind their clinical decisions, explain medical and Unani diagnostic approaches, and discuss treatment plans effectively. Additionally, their communication skills, depth of knowledge, and ability to respond to hypothetical case scenarios or complications are assessed to ensure readiness for professional practice.	30
7	Internal Assessment: It involves assessment of students by colleges through term-wise evaluations, which include periodical assessments and term tests, with each component contributing to the final internal assessment score. The marks from these assessments are converted to a 20-point scale, and the average of the scores from three terms determines the final internal assessment grade.	20
Total		150

References Books/ Resources

S.No	Resources
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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-UAM F	V-UAM F
CC	Cognitive/Comprehension	L&PP T	Lecture with PowerPoint presentation	K H	Know show	T-OBT	Theory open book test	V-KUT	V-KUT
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	S H	Show show	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 - OR G	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-SUI	V-SUI

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		

		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		

		FV	Field Visit			TR	Trainers report		
						SA	Self- assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP- Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstratio n 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		
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