وازرة التعليم العالي والبحث العلمي
جهاز الإشراف والتقويم العلمي
دائرة ضمان الجودة والاعتماد الأكاديمي

استمارة وصف البرنامج الأكاديمي للكليات والمعاهد

الجامعة: وارث الانبياء (ع)
الكلية/ المعهد: كلية الطب
القسم العلمي: وحدة التعليم الطبي / الوحدة الخامسة
للعام الدراسي : 2025-2026
تاريخ ملأ الملف:2025/12/23

التوقيع:
المعاون العلمي: أ.م.د علي عبد الرضا الغرة

التاريخ : 23 \ 12 \ 2025

التوقيع :
رئيس الفرع / أ.م.د.
التاريخ : 23 \ 12 \ 2025

دقق الملف من قبل
مدير شعبة ضمان الجودة والأداء الجامعي
ا.د.علي موسى مهدي
٢٠٢٥ / ١٢ / ٢٣

مصادقة السيد العميد
الاستاذ الدكتور
علي عبد سعدون
23 \ 12 \ 2025

وزارة التعليم العالي والبحث العلمي

جامعة وارث الأنبياء عليه السلام

كلية الطب

دليل البرنامج الأكاديمي ووصف المقررات الدراسية

2025

نموذج وصف المقرر الدراسي

اسم المقرر الدراسي:
الوحدة العلمية: وحدة جهاز العضلي والحركي امراض القلب وصمام الدوران

رمز المقرر
Medu٢٠2

الفصل الدراسي / السنة:
٢٠٢٥-٢٠٢٦
.تاريخ إعداد الوصف:
٢٠٢٥

أشكال الحضور المتاحة:

عدد ساعات الاعتماد (الإجمالي) / عدد الوحدات (الإجمالي):

120 ساعة

أسماء مسؤولي المقرر:

:أهداف المقرر

:في نهاية هذه الوحدة يجب أن يكون الطلاب قادرين على

- .وصف التشريح الطبيعي للقلب، الأوعية الدموية الكبرى، والدورة التاجية
- .شرح فسيولوجيا عضلة القلب، نظام التوصيل الكهربائي، دورة القلب، والديناميكا الدموية
- :التعرف على الفيزيولوجيا المرضية للأمراض القلبية الوعائية الرئيسية
  - أمراض القلب الإقفارية
  - فشل القلب
  - أمراض صمامات القلب
  - ارتفاع ضغط الدم
  - اضطرابات النظم القلبية
  - أمراض القلب الخلقية
- .تحديد المظاهر السريرية للأمراض القلبية الوعائية الشائعة (ألم الصدر ، خفقان، ضيق التنفس، وذمة، إغماء)
- ، تخطيط صدى القلب، إنزيمات القلب، الأشعة السينية للصدر، نتائج ECG) تفسير الفحوصات القلبية الأساسية .(القسطرة

- توضيح مبادئ العلاج (تدابير نمط الحياة، العلاج الدوائي، الخيارات التداخلية والجراحية).
- فهم أمراض القلب الوقائية ودور السيطرة على عوامل الخطر (التدخين، السكري، السمنة، اختلال شحوم الدم، ارتفاع ضغط الدم).

استراتيجيات التدريس والتعلم :-

المحاضرات النظرية

التدريب العملي ومختبر المهارات

الندوات والمناقشات الجماعية

التعلم القائم على حل المشكلات (PBL)

هيكل المقرر:

أ. خريطة المنهج الدراسي

week s	discipline	objectives	hours	Practical sessions & hours
١	**Anatomy**	١. Describe the basic anatomy of sympathetic system ٢. Describe the basic anatomy of parasympathetic system	٢	
	Physiology	١. Define and Compare terms and concepts related to the sympathetic and parasympathetic systems, including: the central location of cell body of origin, number of synapses between CNS and effector organs, degree of myelination, and general effects on target tissues.	٤	

		٢. Define and compare pre- and postganglionic autonomic neurons, and white and gray rami communicants. ٣. Describe the sensory input and roles for visceral afferent fibers of the ANS. ٤. Describe the synaptic characteristics, receptors, and neurotransmitters for the parasympathetic and sympathetic division of the ANS. ٥. Describe the function of non-adrenergic, non-cholinergic fibers in the ANS. ٦. Explain the relatively diffuse action of the sympathetic division compared with the parasympathetic division. ٧. Describe the ANS signaling mechanism and the effects of sympathetic and parasympathetic stimulation of lungs, heart, arteries, and veins; gastrointestinal function; renal function; and sexual function. ٨. Explain the Cardiovascular reflexes ٩. Explain the Cardiorespiratory interactions ١٠. Describe signs and symptoms of ANS dysfunction that may accompany lesions that affect the ANS. Including Horner`s Syndrome, medullary dysfunction, common visceral dysfunction, and multiple system atrophy (Shy-Drager syndrome).		

	Pharmacology	١. Explain the Receptor mechanisms regulating central autonomic function ٢. Describe Nicotinic receptors: distribution, agonists, and antagonists ٣. Describe Muscarinic receptors: subtypes. distribution. agonists. and antagonists ٤. describe Alpha adrenergic receptors: subtypes, distribution. agonists. and antagonists ٥. Describe Beta adrenergic receptors: subtypes. distribution. agonists. and antagonists ٦. Describe Autonomic neuropeptide receptors	٣	
٣	**Physiology**	Cardiovascular system overview: Cardiac system electrical activity: ١. SA node action potentials ٢. Spread of electrical activity from the sino-atrial node to the rest of the heart ٣. Neural regulation of SA node Electrocardiogram (ECG): part ١ ١. ECG and the electrical activity of the heart ٢. Relation of the P wave, QRS complex, T wave to the spread of electrical activity through the different chambers of the heart	٣	Practical lab Anatomy : Anatomy and histology of the heart and vessel Pathology
	Anatomy	١. Osteology of the ribs and sternum Costal cartilages and thoracic articulations ٢. Intercostal muscles ٣. Intercostal vessels, nerves	٣	

		٤. Movements of the thoracic		
	Pathology	Hemodynamic disorder: ١. Define edema and describe its types ٢. Explain the pathophysiology of edema ٣. Describe hperaemia and congestion as terms ٤. Explain pathogenesis of thrombosis with reference to Virchow's triad ٥. Describe morphological features of different types of thrombi, ٦. Differentiate arterial versus venous thrombosis ٧. Describe the fate of thrombi. ٨. Define and describe embolism and its types, ٩. Explain the consequences of thromboembolisim. pulmonary embolism ١٠. Define shock and list its types ١١. Describe the stages of shock ١٢. Recognize the causes of cardiogenic shock Explain the pathogenesis of septic shock	٢	
	Pharmacology	Anti-arrhythmic drugs: ١. Classes of antiarrhythmic drugs & their clinical uses. ٢. Mechanism of action of each class of antiarrhythmic drugs, commonly used drugs, alternative drugs, clinically important interactions & their adverse effects	٢	

	Clinical resources	A. Syncope 1. Definition, etiology of syncope 2. Signs & symptoms of syncope 3. Diagnostic tests 4. Management & prognosis 5. How CPR works 6. Complications of CPR B. Atrial fibrillation and other arrhythmias 1. definition and etiology 2. Signs and symptoms 3. Management i. Differentiate between supraventricular and ventricular arrhythmia treatment\ i. Treatment of common and serious arrhythmias: AF, SVT,VT,VF	1 1	
3	**Pathology** **Anatomy** **Physiology**	Valvular heart diseases 1- Types of valvular heart disease and their etiology 2- Rheumatic Valvular Disease. Infective Endocarditis and the non bacterial thrombotic endocarditis The heart and great vessels: 1. Formation and sinuses of the pericardium 2. Surface & radiographic anatomy of the heart 3. Anatomy of the inside of the chambers of the heart 4. Conducting system of the heart 5. Blood supply of the heart 6. Nerve supply of the heart Surface Anatomy of the thorax: 1. Thoracic cage 2. Precordium and auscultatory areas. 3. Lungs and pleura Electrocardiogram (ECG): part 2 1. Orientation of the 12 leads ECG 2. Cardiac vector and deviations of ECG. 3. Introduction to cardiac arrhythmias.	2 2 2	1. **Practical lab** **Anatomy lab**

		4. Use of ECG as a clinical tool for the diagnosis of cardiac arrhythmias. The cardiac cycle: 1. The phases of the cardiac cycle. 2. The pressure and volume changes in the heart during each phase of the cardiac cycle. 3. Relate the phases of the cardiac cycle to the ECG. 5. The role of the heart valves in the cardiac cycle. 6. Clinical correlation between heart diseases and cardiac cycle		
	Pharmacology	A. Anti- arrhythmic drugs (2): 1. General principals of antiarrhythmic therapy 2. Classification of antiarrhythmic drugs 3. Differences between antiarrhythmic drugs B. Clinical pharmacology of antiarrhythmic drug 1. Differentiate between supraventricular and ventricular arrhythmia treatment\ Treatment of common and serious arrhythmias: AF, SVT,VT,VF	2	
	Microbiology	**Rheumatic fever** **Infective endocarditis** 1 .Causative pathogens Including list, Microbiological and biochemical features, virulence factors and laboratory diagnosis. 2. The mechanism of pathogenesis of each condition	1	
	Clinical resources	**Management of AS** **1.** Significance of valvular heart disease. **2.** Role of valvular heart disease in dyspnoea **3.** How to distinguish AV sclerosis from stenosis **4.** Clinical signs of severe AS **5.** Tests to diagnose AS	1	

		6. Surgery indication **Infective endocarditis and rheumatic fever** 1. Definition and etiology 2. Causative pathogens 3. Signs and symptoms 4. Management	1	
4	**Pathology**	Myocardial infarction: 1- Infarction, definition and types, the factors that influence the development of infarction. 2- reperfusion injury 3- Ischemic heart disease pathogenesis. Angina pectoris. 4- myocardial infarction pathogenesis and morphological changes, consequences and complications chronic ischemic heart disease and sudden cardiac death	2	**Practical lab** **a. biochemistry** **b. pathology**
	Anatomy	The blood supply of the heart: 1. Origin, course and distribution of the right and left coronary arteries. 2. Branches of the right and left coronary arteries 3. Sites of anastomosis between right and left arteries. 4. Basic veins draining the heart focusing on the coronary sinus. 5. Autonomic innervation of the coronary arteries. 6. Define the terms "end arteriesanastomosis" with its clinical implications on cardiac diseases	2	
	Physiology	Control of cardiac output: 1. The control mechanisms of cardiac output		

		2. The role of preload and afterload in determining stroke volume 3. Cardiac muscle contractility Cardiogenic shock: 1. Definition of shock 2. Causes and types of shock 3. The dangers of cardiogenic shock and how it leads to death 4. Management of cardiogenic shock	2	
	Biochemistry	Cardiac enzymes: 1. Understand Isozymes as markers of myocardial infarction 2. Understand Troponin as biomarker; know when to order it and what does the test results mean! 3. Distinguish between angina and myocardial infarction	1	
	Pharmacology	Management of MI: 1. Rationale for Drug Therapy in MI, 2. Classes of Drugs Used to Treat MI, 3. Their mode of action, Clinical uses and common side effects. Hypolipidemic agents: 1. General outlines of treatment of hyperlipidemia 2. Different classes of hypolipidemic agents, 3. Pharmacology of every agent regarding: Mechanism of action, Pharmacokinetics, Clinical effects, Side effects and interaction with other drugs	3	
	Clinical resources	Management of MI 1. DD of chest pain 2. Analysis of pain 3. Sign & symptoms of ischemic coronary syndromes	1	

		4. Examination & diagnosis 5. Management of MI 6. Complications of acute MI Cardiovascular Imaging 1. To gain knowledge about the different imaging modalities used in examination of the CVS. 2. To have a protocol for reading the normal chest x-ray. 3. To review the appearance of some of the common and important abnormalities on Chest x ray.	1	
	Community medicin	1. epidemiology of IHD 2. risk factors and prevention of IHD	1	
5	**Pathology**	Atherosclerosis 1- atherosclerosis risk factors, pathogenesis and morphological features. 2- pathogenesis of hypertension, mechanism of essential hypertension vascular pathology in hypertension. 3- hypertensive heart disease(systemic and pulmonary hypertensive heart disease	2	**Practical Lab** **a. biochemistry lab** **Lipid profile** **(Biochemical lab session)(Lab results interpretation)** **c- pathology lab** ***Morphological changes in atherosclerosis and vascular changes related to hypertension.***
	Anatomy	Functional histology of cardiovascular system 1. Function and histological structure of capillaries 2. Function and components of the arterial system	2	