**Thematic Plan of Courses in Cardiology Discipline for Students of the IV Year, Faculty of Medicine 2, the Academic Year 2024-2025, the spring semester**

Minutes notice of the Department Meeting nr.1, from 30 January 2025

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| **Nr.** | **Theme** | **Lecturer** | | **Hours** | | **Date** |
| **1.** | Cardiovascular noninvazive and invazive explorations.  Biomarkers, components of biological products (blood, urine, tissue), or instumental (ECG, EcoCG, CT, etc.). | Elena Samohvalov  associate prof., PhD, MD. | | 2 | | 03.02.2025  ***20.05.2025*** |
| **2.** | **Preventive cardiology. Cardiovascular risc factors.** Primary and secondary prophylaxis. Lipid and non-lipid risk factors, classical and new. Preventive cardiology. Primary prevention. Population prevention strategy and the high-risk population prevention. Estimated of the total risk according to the SCORE score. Secondary prevention. | Elena Samohvalov  associate prof., PhD, MD. | | 2 | | 03.02.2025  ***20.05.2025*** |
| **3.** | **Atherosclerosis. Dislipidemia.**  Dislipidemias.Definitions.  Blood lipids. Fatty acids. Triglycerides.  Phospholipids. Cholesterol. Apoproteins.  Lipoproteins. Enzymes involved in lipid metabolism. Receptors for high-density lipoprotein.  Lipoprotein metabolism.  Dyslipidemia as risk factor for ischemic heart disease.  Dislipidemia and atherosclerosis.  Etiopathogenesis of dyslipidemias.  Classification of hiperlipoproteinemias. Diagnostics, treatment and prevention of hiperlipoproteinemias.  Non-medical and medical treatment. | Lucia Mazur-Nicorici  prof., PhD, MD. | | 2 | | 04.02.2025  ***21.05.2025*** |
| **4.** | **Arterial Hypertension.**  Definition of hypertension.  Classification of hypertension.  Pathogenesis of hypertension.  Clinical examenation in hypertension.  Paraclinical examinations in patients with hypertension.  Subclinical manifestations of the target organs in hypertension. Nonfarmacological and pharmacological treatment. Rehabilitation. | Angela Tcaciuc  associate prof., PhD, MD. | | 2 | | 05.02.2025  ***22.05.2025*** |
| **5.** | **Hypertensive urgences.**  Hypertensive emergency common and extreme (major vital risk). Accelerated hypertension (malignant) with papilledema. Acute hypertensive left ventricular failure. Acute hypertensive encephalopathy Hypertension associated with acute myocardial infarction, unstable angina, acute dissection of aorta, subarachnoid hemorrhage or stroke.  Hypertension in preeclampsia and eclampsia.  Perioperative hypertension.  Hypertension in the crisis of pheochromocytoma, in drugs usage, acute or chronic renal failure. | Angela Tcaciuc  associate prof., PhD, MD. | | 2 | | 06.02.2025  ***23.05.2025*** |
| **6.** | **Ischemic Heart Disease. Stable Angina.**  Coronary circulation. Definitions. Classification.  Structure of atherosclerotic lesions. Pathogenesis of atherosclerosis. Clinical mechanisms of ischemic heart disease. Risk factors and prevention. Stable angina.  Tratament. Prognosis. Silent ischemia. Definition. Pathogenesis. Clinical manifestations. Diagnostic. Treatment. Prognosis. New ischemic syndromes myocardial preconditioning, siderate and hibernate myocardium. Cardiovascular rehabilitation. | Snejana Vetrilă  associate prof., PhD, MD. | | 2 | | 07.02.2025  ***26.05.2025*** |
| **7.** | **Acute Coronary Syndrome.** **Instable Angina Pectoris. NSTEMI.**  Unstable angina. AP "de novo". Vasospastic AP. PA aggravated. Early postinfarction AP. Microvascular AP. Definition. Pathogenesis. Clinical manifestations. Paraclinic Investigations. Acute myocardial infarction without ST segment elevation (NSTEMI). Clinical manifestations. Paraclinic investigations. Early complications. Late complications. Treatment (general, medical, interventional and surgical measures). Recovery in unstable angina. Cardiovascular rehabilitation) | Snejana Vetrilă  associate prof., PhD, MD. | | 2 | | 10.02.2025  ***27.05.2025*** |
| **8.** | **Acute Myocardic Infarction. Cardiopulmonary and cerebral resuscitation. Sudden cardiac death.**  Acute myocardial infarction without ST segment elevation. Acute myocardial infarction associated with ST segment elevation.The clinical manifestations. Laboratory investigations. Early complications. Late complications. Treatment.  Treatment of reperfusion. Additional treatment methods. AMI treatment without ST elevation. Postinfarct of miocardium treatment.  Sudden death.  Cardiopulmonary and cerebral resuscitation.  The criteria for the stabilizing of the vital indexes.  Transportation and hospitalization of the revived patient. Postresuscitar syndrome management. | Snejana Vetrilă  associate prof., PhD, MD.  Snejana Vetrilă  associate prof., PhD, MD. | | 2  2 | | 11.02.2025  ***28.05.2025***  12.02.2025  ***29.05.2025*** |
| **9.** | **Arrhythmias**  Electrophysiologic mechanisms of aritmogenesis.  Sinus tachycardia. Sinus bradycardia. Sinus arrhythmia. Extrasistolias, joncţionale, ventricular and atrial. Paroxysmal supraventricular tachycardia. Treatment and prevention of paroxismal supraventricular tachycardia. Atrioventricular nodal reentrant tachycardia. Atrial tachycardias. Atrial fibrillation and flutter. Treatment of paroxysmal atrial fibrillation and flutter. Treatment of ventricular tachycardia, flutter and ventricular fibrillation. | Angela Tcaciuc  associate prof., PhD, MD. | | 2 | | 13.02.2025  ***30.05.2025*** |
| **10.** | **Conductibility disorders. Cardiac syncope.**  Sinoatrial and atrioventricular blocks. Intraventricular conduction disorders. Right bundle branch block.  Left bundle branch block. Syndrome of ventricular preexcitation. Antiarrtytmics drugs. Syncopes nervous mediated. Cardiac syncope. | Angela Tcaciuc  associate prof., PhD, MD. | | 2 | | 14.02.2025  ***02.06.2025*** |
| **11.** | **Valvular Heart Diseases.**  Definition. Classification.  Mitral stenosis. Hemodynamics. The clinical picture. Diagnosis. Complications in mitral stenosis. Differential diagnosis. Pharmacological and surgical treatment of mitral stenosis.  Mitral regurgitation. Hemodynamics. The clinical picture. Diagnosis. Complications. Differential diagnosis. Pharmacological and surgical treatment. Mitral valvular prolapse.  Aortic stenosis. Hemodinamics. The clinical picture. Diagnosis. Differential diagnosis. Complications. Treatment of aortic stenosis. Surgical treatment.  Aortic regurgitataion. Hemodynamics. The clinical picture. Diagnosis. Differential diagnosis. Complications. Pharmacological and surgical treatment of aortic regurgitation.  Tricuspid stenosis and regurgitation.  Pulmonary regurgitation. Artificial valve choice and management of patients. | Lucia Mazur-Nicorici  associate prof., PhD, MD.  Lucia Mazur-Nicorici  associate prof., PhD, MD. | | 2  2 | | 17.02.2025  ***03.06.2025***  18.02.2025  ***04.06.2025*** |
| **12.** | **Infective endocarditis.**  Definition. Classification. Etiology. Pathogenesis  Major and minor Duke criteria. Clinical presentation.  Objective signs. Paraclinical study.  Differential diagnostic. Antimicrobian treatment.  Surgical treatment. Prophylaxis. Prognosis. | Alexandra Grejdieru  associate prof., PhD, MD.  Elena Samohvalov  associate prof., PhD, MD. | | 2 | | 19.02.2025  ***05.06.2025*** |
| **13.** | **Primary and secondary diseases of pericardium** Pericardial syndromes. Definition. Classification. The etiology.  Acute pericarditis. Definition. Classification. The symptoms and signs Laboratory tests. Treatment.  Fibrinous pericarditis. Definition.  Classification. Clinical manifestation. Objective signs. Paraclinic nvestigations. Treatment.  Acute exudative pericarditis. Definitions. Classification. Clinical manifestation. Objective signs. Paraclinic investigations. Treatment.  Cardiac tamponade. Clinical picture. Objective signs. Paraclinic Investigations. Treatment.  Chronic pericarditis. Constrictive pericarditis. | Elena Samohvalov  associate prof., PhD, MD.  Silvia Filimon,  associate prof., PhD, MD. | | 2 | | 20.02.2025  ***06.06.2025*** |
| **14.** | **Myocarditis.**  Myocarditis. Definition. Classification.  Etiology. Pathogenesis. The clinical picture. Objective signs. Laboratory investigations. Treatment. Prognosis. | Silvia Filimon  associate prof., PhD, MD.  Silvia Filimon,  associate prof., PhD, MD. | | 2 | | 21.02.2025  ***10.06.2025*** |
| **15.** | **Cardiomyopathies.** Definition. Classification. Idiopathic dilative cardiomyopathy. Definition. Classification. Symptoms and signs. Laboratory investigations. Diagnosis. Treatment.  Hypertrophic cardiomyopathy. Definition. Classification. Symptoms and signs. Laboratory investigations. Diagnosis. Treatment.  Restrictive cardiomyopathy. Definitions. Classification Symptoms and signs. Laboratory investigations. Diagnosis. Treatment.  Arrhythmogenic right ventricle dysplasia. Definitions. Classification. Symptoms and signs. Laboratory investigations. Diagnosis. Treatment. | Elena Samohvalov  associate prof., PhD, MD. | | 2 | | 24.02.2025  ***11.06.2025*** |
| **16.** | **Heart failure**  Causes of heart failure.  Pathophysiology of Heart Failure. Presipitating factors of heart failure. Clinical presentation.  Left-sided and right-sided heart failure.  Acute left-sided heart failure.  Acute right-sided heart failure.  Congestive heart failure.  Hipodiastolic heart failure.  Classification.  Complications.  Treatment of heart failure.  Non-pharmacological treatment  Pharmacological treatment  Other methods of adjuvant treatment  Treatment in diastolic heart failure.  Treatment in acute heart failure  Other methods of adjuvant treatment  Treatment in diastolic heart failure.  Treatment in acute heart failure | | Silvia Filimon  associate prof., PhD, MD  Silvia Filimon  associate prof., PhD, MD | 2  2 | 25.02.2025  ***12.06.2025***  26.02.2025  ***12.06.2025*** | |
| **17.** | **Rehabilitation of patients with cardiovascular diseases.** Rehabilitation of patients with: arterial Hypertension, Angina pectoris, Myocardic Infarction, Valvular Heart Diseases, Infective Endocarditis, Pericarditis, Myocarditis, Cardiomyopathies, Heart failure, arrhythmias  and conductibility disorders. | | Elena Samohvalov  associate prof., PhD, MD | 2 | 27.02.2025  ***13.06.2025*** | |

**Head of Cardiology Department subdivision,**

**MCH „Holy Trinity”, professor, PhD, MD. Livi Grib**

**Head of the study process,**

**associate prof. PhD, MD. Alexandra Grejdieru**

