# INTERNATIONAL HIGHER SCHOOL OF MEDICINE Department of Introduction to Therapy and Family Medicine

#### **SYLLABUS**

Early diagnosis of cardiovascular disease (elective course)

2025-2026 academic year
for students of medical faculty

5<sup>rd</sup> course 10 semesters, groups 1-47
2 credits (60 h, including auditorial 32 h, independent work – 28 h)

Lecturer:

Hossain Syed Azfar

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Venue:

Zoom

Practical

Saed H.,

classes:

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Venue:

Vedanta hospital, polyclinic №7

The Syllabus is considered at the meeting of the department of Introduction to Therapy and Family Medicine Protocol № 2 dated 10.09/2025

Head of the department\_

Haceef Kamchybekova A.A.

# After study of the discipline the student must:

#### **Knowledge:**

- Specific features of the main syndromes of organ and system involvement in the most common diseases
- Prognosis and key aspects of diseases requiring patient self- management.

#### To be able:

- To group disease syndromes into nosological forms based on clinical, laboratory, and functional examination methods in adults for the diagnosis of diseases and pathological processes.
- To train patients and their relatives in monitoring basic health indicators in diseases requiring patient self-management.

#### Skill:

- substantiating and formulating a diagnosis based on the results of clinical, laboratory, and functional examinations in adults.
- Must possess skills in identifying the key aspects of diseases that require patient self-management.

#### Pre-requisites.

- 1. Nursing
- 2. Propedtherapy
- 3. Module cardiovascular disease
- 3. Internal disease

### Post-requisites.

- 1. Family medicine
- 2. State exam

# THEMATIC PLAN OF LECTURES

No	Theme of lecture	Hours	Date
1.	New methods of diagnosis of coronary artery disease	2	Sept2025
2.	New approaches to the differential diagnosis of dyslipidemia and hypercholesterolemia	2	Sept2025
3.	Early diagnosis of complications of coronary artery disease in an outpatient management.	2	Sept2025
4.	Early diagnosis and outpatient treatment of hypertension.	2	Sept2025
5.	Early diagnosis and treatment of hypertensive crises at the outpatient management.	2	Sept2025
6.	ECG diagnosis of arrhythmias	2	Sept2025
	Total:	12	

# THEMATIC PLAN OF PRACTICAL CLASSES

$\mathcal{N}_{\underline{o}}$	Theme of practical class	Hours	Date
1.	Choosing and interpretation a lipid profile and identification the desirable lipid profile in the clinical context	2	Sep.2025
2.	New approaches to the differential diagnosis of dyslipidemia and hypercholesterolemia	2	Sep.2025
3.	The pathogenesis natural history, evolution and complications of atherosclerosis and IHD	2	Sep2025
4.	Unit 1	2	Sep2025
5.	Early diagnosis and outpatient treatment of hypertension.	2	Sep.2025
6.	Recognizing, prioritizing and management hypertensive emergencies	2	Sep.2025
7.	ECG diagnosis of a normal heart. WPW syndrome.	2	Sep.2025
8.	ECG diagnosis of arrhythmias	2	Sep.2025
9.	ECG of cardiac conduction disturbances	2	Sep.2025
10.	Unit 2	2	Sep.2025

Total:	20	

#### THEMATIC PLAN OF INDEPENDENT WORK OF STUDENTS

Unit №	Theme of independent work	Hours	Date
1	Risk of e-cigarette use on cardiovascular health in patients with CCD.	4	
1	Diet and heart disease risk	4	
1	Management of complications of acute coronary syndromes including arrhythmias, shock, LV dysfunction, papillary muscle rupture and pericarditis		
2	Cognitive Decline, Dementia and Hypertension.	4	
2	Resistant Hypertension: diagnosis, evaluation, and treatment		
2	Nocturnal arrhythmias, diagnosis, management		
2	AF Catheter Ablation. Complications.	4	
	Total:	28	

## Recommended reading for the discipline:

#### 1. Basic:

- 1. Kumar and Clark 's Clinical Medicine / Elesevier, 2013
- 2. Kumar and Clark 's Clinical Medicine / Elesevier, 2018

#### 2. Additional:

- 1. Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.1.-International edition, 2005
- 2. Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- 3. Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

# Grading policy and procedures for all types of work

For the period of studying the discipline, the student gains points for the relevant parameters (per unit): current score - 40 points

independent work - 20 points

control score (final assessment of knowledge per unit) - 40 points

Maximum score - 100 (40+20+40)

# Grading system for student's achievements

Grading criteria per discipline				
Maximum score	Intervals			
	«unsatisfactory »	«satisfactory»	«good»	«excellent»
Current control - 40	0-23	24-30	31-35	36-40
Interval description	Does not know theory, and does not know	Knows little theory, applies some practical	Knows the theory, but makes	Knows the theory and correctly

	how to apply practical skills, does not know how to communicate	skills, average communication skills	mistakes, mastered practical skills and communication s well	applies practical skills, communication skills are developed
Independent work - 20	0-11	12-15	16-17	18-20
Interval description	Nothing completed over or completed over but everything wrong	H/W handed over, but not completely and with mistakes	Not all h/w surrendered, or surrendered completely, but there are mistakes	All h/w handed over complete and correctly
Control work (module) - 40	0-23	24-30	31-35	36-40
Interval description	Doesn't know anything, doesn't know how to apply practical skills	Knows little theory, knows how to apply some practical skills		Knows theory and applies practical skills correctly

#### Conduct Policy: (lateness, absence, behavior in the auditorium, late submission of work).

- Punctuality and completion of tasks.
- Mandatory attendance of classes.
- Attending class in a clean medical uniform.
- Eliminating conversations on a cell phone in the classroom.
- Active participation in the learning process.
- Doing homework on time.
- Academic detention at the time specified by the teacher.

For violations of the Conduct Policy, the total points for discipline might be reduced to 1-10 points.

# **Academic Ethics Policy.**

- Be tolerant, respect the opinions of others.
- Formulate objections in the correct form.
- Constructively support feedback in all classes.
- Plagiarism and other forms of dishonest work are unacceptable. Plagiarism includes the following: the absence of references when using printed and electronic materials, quotes, thoughts and works of other authors or students.
- Prompting and cheating during tests, exams, classes is unacceptable as well as passing an exam for another student, unauthorized copying of materials.

For violations of the Academic Ethics Policy, the total points for the discipline may be reduced to 1-10 points.

# Guidelines for the lessons of the discipline

Unit I Key questions covered in lesson 1: Choosing and interpretation a lipid profile and identification the desirable lipid profile in the clinical context

- 1. Differential diagnosis of ACS
- 2. Ambulatory treatment of patients
- 3. Hospitalization criteria's
- 4. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, cholesterol, triglycerides, markers of MI)
- 5. Interpreted instrumental examination (Chest X-ray, ECG)

#### Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

## Unit I Key questions covered in lesson 2: Algorithm for examining a patient with suspected atherosclerosis

- 1. Risk factors for the development of atherosclerosis
- 3. Hospitalization criteria's
- 4. Interpreted lab.tests (CBC, urine tests, CRP, , KFT, biochemical tests)

# Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

# Unit I Key questions covered in lesson 3: The pathogenesis natural history, evolution and complications of atherosclerosis and IHD

- 1. Ambulatory treatment of patients with complications of CAD
- 2. Hospitalization criteria's
- 3. Interpreted lab.tests (CBC, urine tests, sputum test, CRP, LFT, KFT etc.)
- 4. Interpreted instrumental examination (Chest X-ray, ECG, ECO-ECG, MRI)

#### Recommended reading for this discipline:

- [1] Kumar and Clark 's Clinical Medicine / Elesevier, 2013
- [2]Kumar and Clark 's Clinical Medicine / Elesevier, 2018

#### Unit I Key questions covered in lesson 4: Unit control

- 1. Differential diagnosis of ischemic heart disease
- 2. Ambulatory treatment of patients with stable and unstable angina pectoris
- 4. Interpreted lab.tests (CBC, urine tests, CRP, biochemical tests, markers of MI)
- 5. Interpreted instrumental examination (Chest X-ray, ECG, EcoCG, abdominal ultrasonography)

# Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

## Unit I Key questions covered in lesson 5: Early diagnosis and outpatient treatment of hypertension

- 1. Early diagnosis of essencial and secondary hypertension
- 2. Ambulatory treatment of patients
- 3. Hospitalization criteria's
- 4. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, cholesterol, triglycerides, lipid profile
- 5. Interpreted instrumental examination (Chest X-ray, ECG, abdominal ultrasonography)

# Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

#### Unit I Key questions covered in lesson 6: Recognizing, prioritizing and management hypertensive emergencies

- 1. Ambulatory treatment of patients withn hypertension crisis.
- 2. Hospitalization criteria's
- 4. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, cholesterol, triglycerides)
- 5. Interpreted instrumental examination (Chest X-ray, ECG, abdominal ultrasonography)

## Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

#### Unit I Key questions covered in lesson 7: ECG diagnosis of a normal heart. WPW syndrome.

- 1. Treatment of patients with WPW-syndrome
- 2. Hospitalization criteria's
- 3. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, electrolyte's)
- 4. Interpreted instrumental examination (Chest X-ray, ECG, daily ECG (in 24 h)., abdomen ultrasonography)

# Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014

# Unit I Key questions covered in lesson 8: ECG diagnosis of arrhythmias

- 1. Treatment of patients with arrhythmias
- 2. Hospitalization criteria's
- 3. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, electrolyte's)
- 4. Interpreted instrumental examination (Chest X-ray, ECG, daily ECG (in 24 h)., abdomen ultrasonography)

#### Recommended reading for this discipline:

- [1] Principles of Internal Medicine / editor- in- chief, TR Harrison / Harrison 's 16 th ed., V.2.-International edition , 2005
- [2] Principles and practice of Medicine / editor- in -chief, Davidson 's 22 th ed.- Churchil Livingstone, 2014 **Unit I Key questions covered in lesson 9**: Unit control
- 1. Treatment patients with hypertensions, acute coronary syndrome, cardiomyopaty. Emergency treatment of patients with arrhythmias, MI.
- 2. Hospitalization criteria's
- 3. Interpreted lab.tests (CBC, urine tests, CRP, LFT, KFT, electrolyte's)
- 4. Interpreted instrumental examination (Chest X-ray, ECG, daily ECG (in 24 h)., abdomen ultrasonography)

#### Methodological instructions for the implementation of independent work on the discipline

To perform independent work, students need to reinforce their knowledge materials from lectures, skills from practical classes and cases. And study how use guidelines\books to different disorders.