

Edition: 09

Date: 08.09.2021

# FACULTY OF MEDICINE STUDY PROGRAM 0912.1 MEDICINE INTERNAL MEDICINE DEPARTMENT DISCIPLINE OF INTERNAL MEDICINE-SEMIOLOGY

APPROVED	APPROVED
at the meeting of the Commission for	at the Council meeting of the Faculty Medicine
Quality Assurance and Evaluation of the	Minutes No. \ of 21.08.21
Curriculum Faculty Medicine	Dean of the Faculty Mediome 2,
Minutes No. of the 208 : M	associate professor
Chairman, PHD, univesity professor	Mircea Betiu
Suman Serghei	- Clark
( )	

# **APPROVED**

at the meeting of the Discipline of internal medicine-semiology

Minutes No. 2 of 090221

Head of the Discipline of internal medicine-semiology,

professor Istrati Valeriu 1998

# **SYLLABUS**

# DISCIPLINE INTERNAL MEDICINE-SEMIOLOGY

# **Integrated studies**

Type of course: Compulsory

Curriculum developed by the team of authors:

Istrati Valeriu, PhD,dr. of med., professor, Smisnoi Mariana, PhD,dr. of med., professor, Sarbu Oxana university assistant



Edition:	09
Date:	08.09.2021

## I. INTRODUCTION

• General presentation of the discipline: the place and role of discipline in the formation of specific competences of the programme of professional training/specialty

Studying the technique and methods clinical examination of patients therapeutic; the main methods of laboratory diagnosis and instrumental (with the most complicated to make them aware);

- The mission of the curriculum (purpose) in professional training
- to learn to detect the symptoms of diseases of the internal organs, to be able to understand and explain their origin;
- to learn the rationale of the diagnosis of the syndrome;
- to learn to appreciate the role of symptoms and syndromes in diagnosis of some of the most important diseases with an explanation of the principles of the urgent medical help in these conditions (the preparation to the practical training after the third year);
- Language (s) of the discipline: English, Romanian, Russian, French;
- Beneficiaries: students of the year 3, faculty of Medicine No. 1, No. 2, specialty Medicine.

## II. MANAGEMENT OF THE DISCIPLINE

Code of discipline		S.05.O.040	
Name of the discipline Internal medicine-semiology		3 <b>y</b>	
Person(s) in charge of	the discipline	Istrati Valeriu	
Year	3	Semester/Semesters	5
Total number of hours	, including:		150
Lectures	30	Practical	30
Seminars	30	Self-training	60
Form of assessment	E	Number of credits	5

Code of discipline		S.06.O.0.49	
Name of the discipline Internal medicine-semiology		niology	
Person(s) in charge of	the discipline	Istrati Valeriu	
Year	3	Semester/Semesters	6
Total number of hours, including:			180
Lectures	30	Practical	30
Seminars	30	Self-training	90
Form of assessment	E	Number of credits	6

## III: TRAINING AIMS WITHIN THE DISCIPLINE

At the end of studying the discipline the student will be able:

- at the level of knowledge and understanding:
- to recognize the syndromes main in internal medicine at the patients;
- to know the particularities of the onset and evolution of main of internal medicine;
- to understand the methodology and the peculiarities of examination of patients with diseases principal of internal medicine;
- know the etiology and pathogenesis of key diseases of internal medicine in prizma achievement of the clinical syndromes studied;
- to know the contemporary methods of investigation (urgent and scheduled) in the main of internal medicine;
- to know the principles of treatment of the diseases studied;



Edition:	09
Date:	08.09.2021

• to know the methods of the prophylaxis of the pathologies of chronic and acute applied in internal medicine.

# at the application level:

- application of theoretical knowledge in the practice of the professional activity and social;
- collection and accurate estimation of complaints and data of anamnesis with the explanation of mechanisms:
- proper examination of the patient on systems;
- diagnosis presumptive;
- the application of the methods of investigation necessary for the confirmation of the diagnosis;
- appreciation of the results of laboratory investigations and instrumental;
- the principles of medical aid in critical states in internal medicine;
- meeting and drafting medical documents (in the completing of academic clinical case);
- development of projects of scientific research in the field of internal medicine.

## at the integration level:

- appreciation of the importance of pathology internistice in the context of general medicine and integration with related medical disciplines;
- appreciation of the evolution of physiological processes, the etiology and pathophysiology of pathological processes of the adult;
- the development of clinical judgment, based on the principles of diagnosis sindromal of the various nozological forms and principles of the treatment;
- creative approach to problems in internal medicine;
- the deduction of the interrelationship between internal medicine and other medical disciplines (physiology, pathophysiology, pathology, radiology, etc.);
- ability to assess and evaluate oneself objectively the knowledge in the field;
- strengthening the knowledge and accumulation of experience of clinical examination of patient, diagnosis sindromal, and principles of treatment of the diseases studied;
- ability to learn new achievements in the discipline of internal medicine-semiolologie.
- to appreciate the importance of Internal diseases in the context of Medicine.

# IV. PROVISIONAL TERMS AND CONDITIONS

For a better learning of the discipline internal Medicine-semiology are necessary deep knowledge in the field of the disciplines studied in previous years (biology and medical genetics, human physiology, microbiology, histology and pathology, physiology, pathological, radiology and medical imaging, etc.).

# V. THEMES AND ESTIMATE DISTRIBUTION OF HOURS

Lectures, practical hours/laboratory hours/seminars and self-training

No.			Number of hours	
d/o	THEME	Lectures	Practical/	Self-
u/O			Seminars	training
	Introductory course in semiology of internal diseases. Deontology and			
1.	Medical ethics. Medical documentation. The general plan of examination of	2	4	4
	the patient.			
	Clinical examination of the respiratory system. Interview, general			
2.	inspection. Inspection of chest wall. Palpation as a method of	2.	4	4
۷.	investigation of the patient. Palpation of the chest. Percussion of the	2	4	4
	lungs.			
3.	Auscultation as a method of investigation of the patient. Auscultation of	2	4	4
٥.	the lungs. Main and adventition respiratory sounds.	2	4	4



Edition: 09

Date: 08.09.2021

No.		Nu	ımber of hou	
d/o	THEME	Lectures	Practical/ Seminars	Self- training
4.	Clinical exploring of the patient with cardiovascular disease. The interrogation. Inspection. Palpation of the precordial area and large blood vessels. Percussion of the heart.	2	4	4
5.	Auscultation of the heart. Auscultation of the heart. Normal heart sounds. The pathological changes of the heart sounds. Beats in three phases. Overlapping sounds. Disorders of the rhythm.	2	4	4
6.	Auscultation of the heart. Murmurs heart. Murmurs systolic and diastolic. Topography and radiation. Fonocardiografia.	2	4	4
7.	Examination of peripheral vessels. Assessment of peripheral arterial pulse and blood pressure. Auscultation of the vessels. The method of examination of the blood vein and the speed of the blood flow.	2	4	4
8.	Electrocardiografia. The method of recording and decoding of ECG. The standard and thoracic leads. ECG in hypertrophy of the heart compartments.	2	4	4
9.	Complementary methods of examination of the cardiovascular system. Respiratory and cardiovascular systems examination of the standardized patient in <b>CUSIM</b> .	2	4	4
10.	Methods of examination of patients with diseases of the digestive tract: complaints, inspection, auscultation, percussion, palpation of the abdomen. The additional methods of examination.	2	4	4
11.	Methods of examination of patients with diseases of the liver and gallbladder: complaints, inspection, percussion and palpation of the liver, gallbladder and spleen.	2	4	4
12.	Clinical and laboratory methods of examination of patients with diseases of the kidneys and urinary tract. Laboratory examination of urine.	2	4	4
13.	Methods of examination of patients with disorders of the endocrine system. Clinical case report (fragment).	2	4	4
14.	Syndrome of bronchial obstruction. Semiology of acute and chronic bronchitis, bronchial asthma. Syndrome hiperaerație pulmonary (emphysema). COPD.	2	4	4
15.	The syndrome of the lung tissue consolidation(pneumonia and atelectasis). Clinical signs of pneumonia, their pathogenesis. Pulmonary atelectasis.	2	4	4
16.	Pleural syndromes. Pneumothorax (accumulation of air in the pleural cavity) and hydrothorax (pleural effusion). Exudative pleurisy and the fibrinous pleurisy. Clinical case report (academic).	2	4	5
17.	Syndrome of lungs cavity. Mediastinal syndromes. Examination of the standardized patient in <b>CUSIM</b>	2	4	5
18.	Complementary methods of examination of the cardiovascular system.	2	4	6
19.	Cardiac disrrythmias.	2	4	6
20.	The clinical syndrome of hypertension. Essential and secondary hypertension. Hypotension.	2	4	6
21.	The clinical syndrome of heart failure. Acute and chronic heart failure. Cardiac asthma. Pulmonary edema. Cord pulmonale acute (TEAP). Chronic pulmonary heart.	2	4	6
22.	Articular syndromes. Rheumatic fever.Mitral valvulopaties. Mitral stenosis. Mitral regurgitation. Mitral prolapse. Tricuspid Valvulopaties.	2	4	6



Edition:	09
Date:	08.09.2021

No.			Number of hours		
d/o			Practical/ Seminars	Self- training	
23.	Aortic Valvulopaties. The aortic stenosis. Aortic insufficiency. Pulmonary trunk valvulopaties.	2	4	6	
24.	Syndrome of coronary insufficiency. Ischemic heart disease, clinical forms. Pathogenesis, epidemiology, classification. Clinical examination, laboratory and instrumental exam. Angina pectoris.	2	4	6	
25.	Acute myocardial infarction. Pathogenesis, stages. Clinical examination, laboratory and instrumental. Complications of miocardial infarction.	2	4	6	
26.	Clinical syndromes of endocarditis, myocarditis, pericarditis.	2	4	6	
27.	Clinical syndromes in gastrointestinal tract diseases. Examination of patients with gastritis, gastric and duodenal ulcer disease. Cancer of the gastrointestinal tract.	2	4	6	
28.	Liver syndromes: jaundice, portal hypertension and liver failure. Chronic hepatitis and liver cirrhosis. Examination of patients with hepatitis and cirrhosis. Supervision and care of patients with disturbances of the functions of the digestive system.		4	6	
29.	Clinical syndromes of glomerulonephritis and tubular-interstitial diseases. Acute and chronic glomerulonephritis. Urinary syndrome. Nephrotic syndrome. Renal amyloidosis. Acute and chronic pyelonephritis. Nephrolithiasis. Syndrome of acute and chronic renal failure.	2	4	6	
30.	Clinical syndromes in endocrine diseases. Examination of patients with disorders of the thyroid gland and in diabetes mellitus. Diabetic comas. Clinical case report (academic).	2	4	6	
Tota	ıl	60	120	150	

# VI. PRACTICAL TOOLS PURCHASED AT THE END OF THE COURSE

Mandatory essential practical tools are:

- 1. Passport data
- 2. The main accusations
- 3. General accusations
- 4. History of the disease
- 5. Biographical data
- 6. Work history
- 7. Personal physiological antecedents
- 8. Harmful habits
- 9. Personal pathological antecedents
- 10. Allergological history
- 11. Social insurance anamnesis
- 12. Heredo-collateral antecedents
- 13. Consecutiveness of history collection
- 14. Appreciation of the constitutional type
- 15. Skin condition (moisture, turgor), visible mucous membranes
- 16. Assessment of nutritional status
- 17. Assessment of peripheral edema
- 18. Assessment of lymph nodes



Edition:	09
Date:	08.09.2021

- 19. Appreciation of painful points on the head
- 20. Muscular system (tone), oateo-articular (percussion of flat bones, joint mobility)
- 21. Appreciation of the symmetry of the participation of the hemithorax in breathing
- 22. Appreciation of the elasticity of the chest and painful points
- 23. Vocal quavering
- 24. Comparative percussion of the lungs
- 25. Auscultation of the lungs (vesicular)
- 26. Bronchophony
- 27. Continuity of the examination of the respiratory system
- 28. Assessment of apex shock
- 29. Assessment of cardiac shock
- 30. Assessment of atypical pulsations in the precordial region
- 31. Limits of the relative dullness of the heart
- 32. Percussion of the vascular pedicle
- 33. Auscultation of the heart
- 34. Determination of the pulse
- 35. BP measurement
- 36. Continuity of the examination of the cardiovascular system
- 37. Oral cavity inspection
- 38. Superficial palpation of the abdomen, s-m Blumberg
- 39. Deep, methodical sliding palpation of the abdomen according to Obraztsov-Strajesco
- 40. The consistency of the deep palpation of the abdomen
- 41. Percussion of the abdomen (appreciation of free fluid)
- 42. Percussion of the liver according to Kurlov
- 43. Palpation of the liver
- 44. Evaluation of the gall bladder; sign Murphy, Ortner
- 45. Palpation of the spleen
- 46. Zuksgtion of the spleen
- 47. Palpation of the kidneys, the patient lying on his back
- 48. Palpation of the kidneys, the patient in an upright position
- 49. Tapping maneuver
- 50. Palpation of the thyroid gland

# VII. REFERENCE OBJECTIVES AND CONTENT UNITS

#### Objectives Content units

For each theme provided by the syllabus will follow the aim that the student:

#### • to know:

- the basics of physical methods of physical examination of the patient, the technique of the execution of the practical of the dexterities practical;
- characteristic of the clinical data obtained in the examination, physical of the patient and the interpretation of variants of their modification;
- the painting semiologically of the syndrome discussed at each theme;
- diseases that are manifested by the syndrome in question;

# • to define:

- syndrome discussed at each theme;
- to know:



Edition:	09
Date:	08.09.2021

Objectives Content units

- breakdown syndrome, which includes pathophysiology, semiology, modern methods of investigation, the significance of the syndrome for the diagnosis nozologic;
- diseases that are manifested by the syndrome in question;
- the modern aspects of etiology and pathogenesis of the diseases discussed in each theme;
- principles of clinical diagnosis sindromal and paraclinical (laboratory and instrumental) of each entity nosological with argumentation;

## • to demonstrate the ability:

- to perform examination, physical of the patient with argumentatrea the data obtained during the examination:
- to carry out the clinical diagnosis sindromal with his reasoning;
- to draw up a plan of examination laboratory with his reasoning;

# to apply:

- the knowledge and practical skills accumulated;
- the diagnosis algorithm sindromal, and the principles of treatment in any state of emergency;
- knowledge related to the preparation of medical documentation (chart academic, daily records of the patient).
- to integrate knowledge in the fields of fundamental subjects, preclinical and the clinical.

# Theme 1. Introductory course in semiology of internal diseases. Deontology and Medical ethics. Medical documentation. The general plan of examination of the patient.

- to define the notions of the medical course.
- to know the concepts of medical ethics and deontology.
- demonstrate knowledge in the examination of medical documentation.
- to apply the knowledge acquired to perform the query (the collection of anamnesis) of the patient;
- Deontology and medical ethics
- Medical documentation (medical records, records of indications, the sheet temperature).
- The general plan of examination of the patient.
- Plan the medical history of the patient.
- Plan general Inspection of the patient.
- Determination of the indices of the anthropometric mesurements.

# Theme 2. Clinical examination of the respiratory system. Interview, general inspection. Inspection of chest wall. Palpation as a method of investigation of the patient. Palpation of the chest. Percussion of the lungs.

- to define the notions of semiology medical of the respiratory system.
- to know the anatomy and physiology of the respiratory system.
- To know the sequence of physical examination of the patient in the context of the examination of the respiratory system.
- to apply the knowledge acquired to perform the query (the collection of anamnesis) of the patient with disorders of the respiratory system;
- to integrate in medical practice changes in objectives of the inspection, palpaţiei and percussion of the respiratory system

- Interrogation;
- Inspection;
- Palpation;
- Percussion:

# Theme 3. Auscultation as a method of investigation of the patient. Auscultation of the lungs. Main respiratory sounds and adventition.

- To define the notions of auscultation of the lungs
- to know the mechanisms of the formation of the phenomena of auscultative pulmonary and clinical interpretation of their.
- to demonstrate practical knowledge in the auscultation of
- Mechanism of the formation of breath sounds main;
- Mechanism of the formation of breath sounds overlapping;
- The rules of auscultation of the lungs.



Edition:	09
Date:	08.09.2021

Objectives	Content units
the respiratory system;	
• to apply the knowledge acquired for the conduct of	
auscultation of the patient with disorders of the respiratory	
system;	
• to integrate in medical practice changes in objectives of the	
of auscultation of the respiratory system.	
Theme 4. Exploring the clinical course of the patient with c	ardiovascular disease. The interrogation. Inspection.
Palpation of the precordial area and large blood vessels. Per	rcussion of the heart.
• to define the notions of semiology health of the	Interrogation;
cardiovascular system.	Inspection;
• to know the anatomy and physiology of the cardiovascular	Palpation;
system.	Percussion;
• To know the sequence of physical examination of the	
patient in the context of the examination of the	
cardiovascular system.	
• to apply the knowledge acquired to perform the query (the	
collection of anamnesis) of the patient with disorders of the	
cardiovascular system.	
• to integrate in medical practice changes in objectives of the	
inspection, palpației and percussion cardiovascular system.	
Theme 5. Auscultation of the heart. Auscultation of the he	eart. Normal heart sounds. The pathological changes
of the heart sounds. Beats in three phases. Overlapping sour	nds. Disorders of the rhythm.
• To define the notions of auscultation of the heart;	• Mechanism of formation of heart s normal sounds
• to know the mechanisms of the formation of heart sounds	• Mechanism of formation of overlapping sounds;
and the interpretation of the clinical relevance of their.	• Mechanism of formation of rhythms in three times;
• to demonstrate practical knowledge in the auscultation of	• The rules of auscultation of the heart.
the cardiovascular system;	The rules of auscultation of the heart.
• to apply the knowledge acquired for the conduct of	
auscultation of the patient with disorders of the	
cardiovascular system;	
• to integrate in medical practice changes in objectives of the	
of auscultation of the cardiovascular system.	
Theme 6. Auscultation of the heart. Murmurs heart.	Murmurs systolic and diastolic. Topography and
radiation. Fonocardiografy.	
• To define the notions of auscultation of the heart;	<ul> <li>Mechanism of formation of heart murmurs;</li> </ul>
• to know the mechanisms of the formation suflurilor cardiac	<ul> <li>Mechanism of formation of diastolic murmurs;</li> </ul>
and clinical interpretation of their.	<ul> <li>Mechanism of formation of systolic murmurs;</li> </ul>
• to demonstrate practical knowledge in auscultation	• The rules of auscultation of the heart murmurs.
suflurilor heart;	
• to apply the knowledge acquired for the conduct of	
auscultation suflurilor heart to the patient with disorders of	
the cardiovascular system;	
• to integrate in medical practice changes in objectives of the	
of auscultation suflurilor heart.	
Theme 7. Examination of peripheral vessels. Assessmen	t of peripheral arterial pulse and blood pressure.

Auscultation of the vessels. The method of examination of the blood vein and the speed of the blood flow.

• Interrogation;

• Inspection;

Palpation;

Percussion;

• Auscultation;

• To define the notions of examination of peripheral vessels

• to know the mechanisms of the formation of the properties

of the pulse and the interpretation of the clinical relevance of

and blood pressure;

their.



system.

system.

digestive system.

• To know the sequence of physical examination of the

patient in the context of the examination of the digestive

• to apply the knowledge acquired to perform the query (the collection of anamnesis) of the patient with disorders of the

# **CD 8.5.1 DISCIPLINE CURRICULUM**

Edition:	09
Date:	08.09.2021

Objectives	Content units
• to demonstrate practical knowledge in the auscultation of	
the vessels and the determination of the blood pressure;	
• to apply the knowledge acquired to determine the changes	
in pulse and blood pressure to the patient with disorders of	
the cardiovascular system;	
• to integrate in medical practice objective changes in pulse	
and blood pressure to the patient with disorders of the	
cardiovascular system.	
·	and decading of ECC. The standard and there is
Theme 8. Electrocardiografia. The method of recording leads ECC in hypertrusty of the heart compartments.	and decoding of ECG. The standard and thoracic
leeds. ECG in hypertrophy of the heart compartments.	ECC ' ' '
• To define noțini electrophysiology of the heart;	• ECG registration
• to know the methods of recording ECG	<ul> <li>ECG interpretation</li> </ul>
• to demonstrate practical knowledge in deciphering the	
electrocardiogram of normal and in hipertrofiile atrial and	
ventricular;	
• to apply the knowledge acquired to determine the	
electrocardiographic changes in patients with disorders of the	
cardiovascular system;	
• to integrate in medical practice objective changes to	
electrogardiogramei to the patient with disorders of the	
cardiovascular system.	
Theme 9. Complementary methods of examination of the	cardiovascular system. Examination of the standard
patient in CUSIM.	
• To define the methods of supplementary examination of the	<ul> <li>Echocardiography</li> </ul>
cardiovascular system;	<ul> <li>Fonocardiografia</li> </ul>
• to know the methods of supplementary examination of the	Doplerografia
cardiovascular system	<ul> <li>Computed tomography</li> </ul>
• to demonstrate practical knowledge in deciphering the	<ul> <li>Coronary angiography</li> </ul>
methods of supplementary examination of the cardiovascular	<ul> <li>Scintigraphy of the myocardium</li> </ul>
system;	Interrogation;
• to apply the knowledge acquired for the determination of	Inspection;
the changes in the methods of supplementary examination of	Palpation;
the cardiovascular system in patients with disorders of the	Percussion;
cardiovascular system;	Auscultation;
• to integrate in medical practice objective changes in the	
complimentary examination of the cardiovascular system in	
patients.	
• Respiratory and cardiovascular systems examination of the	
standardized patient in <b>CUSIM</b> .	
Theme 10. Methods of examination of patients with dis	eases of the digestive tract: complaints inspection
auscultation, percussion, palpation of the abdomen. The ad-	
• to define the notions of semiology medical of the digestive	• Interrogation;
system.	• Inspection;
• to know the anatomy and physiology of the digestive	• Palpation;
system.	• Percussion;
~ , ~ · · · · · · ·	1 -1

Auscultation;



Edition:	09
Date:	08.09.2021

Objectives	Content units
• to integrate in medical practice changes in objectives of the	
inspection, palpației and percussion of the digestive system.	
	diseases of the liver and gallbladder: complaints,
inspection, percussion and palpation of the liver, gallbladde	<u> </u>
• to define the notions of semiology medical of the liver and	Interrogation;
gallbladder.	• Inspection;
• to know the anatomy and physiology of the liver and	Palpation;
gallbladder.	Percussion;
• To know the sequence of physical examination of the	Auscultation;
patient in the examination of the liver and gallbladder.	
• to apply the knowledge acquired to perform the query (the	
collection of anamnesis) of the patient with disorders of the	
liver and gallbladder.	
• to integrate in medical practice changes in objectives of the	
inspection, palpației and percussion of the liver and	
gallbladder.	
Theme 12. Clinical and laboratory methods of examination	n of patients with diseases of the kidneys and urinary
tract. Laboratory examination of urine.	
• to define the notions of semiology medical system	• Interrogation;
renourinar.	• Inspection;
• to know the anatomy and physiology of the system	• Palpation;
renourinar.	• Percussion;
• To know the sequence of physical examination of the	Auscultation;
patient in the examination system renourinar.	
• to apply the knowledge acquired to perform the query (the	
collection of anamnesis) of the patient with disorders of the renourinar.	
• to integrate in medical practice changes in objectives of the	
inspection, palpatiei and percussion system renourinar.	
Theme 13. Methods of examination of patients with disor	ders of the endocrine system. Clinical case report
(academic).	ders of the chaocrine system. Chinear case report
• to define the notions of semiology medical the endocrine	· Interrogation;
system.	• Inspection;
• to know the anatomy and physiology of the endocrine	*
system.	• Percussion;
• To know the sequence of physical examination of the	• Auscultation;
patient in the context of the examination of the endocrine	1 Modulation,
system.	
• to apply the knowledge acquired to perform the query (the	
collection of anamnesis) of the patient with disorders of the	
endocrine system.	
• to integrate in medical practice changes in objectives of the	
inspection, palpation and percussion of the endocrine system.	
• clinical case report (fragment)	
Theme 14. Syndrome of bronchial obstruction. Semiology	of acute and chronic bronchitis, bronchial asthma.
Syndrome pulmonary distension(emphysema). COPD.	
• To define the concepts of acute and chronic	Definition;
bronchitis, bronchial asthma. syndrome hiperaerație	Epidemiology;
pulmonary (emphysema). COPD.	• Etiology;
• to know the changes in the clinical examination of the	Clinical manifestations;

pulmonary (emphysema). COPD.

• to know the changes in the clinical examination of the



Editi	on:	09
Date	::	08.09.2021

# Objectives

of acute and chronic bronchitis, bronchial asthma. syndrome hiperaerație pulmonary (emphysema). COPD.

- to demonstrate the role of the etiologic factors in acute and chronic bronchitis, of the bronchial asthma. syndrome hiperaerație pulmonary (emphysema). COPD.
- to apply the methods of clinical investigation caracteristice for each of the clinical syndromes
- to integrate the knowledge in the diagnosis sindromal of the of acute and chronic bronchitis, bronchial asthma. syndrome of pulmonary distension (emphysema). COPD.

#### **Content units**

- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental:
- Evolution;

# Theme 15. The syndrome of the lung tissue consolidation (pneumonia and atelectasis). Clinical signs of pneumonia, their pathogenesis.. Pulmonary atelectasis.

- To define the concepts of the syndrome of the lung tissue consolidation
- to know the changes in the clinical examination of the syndrome of condensation of the lung tissue
- to demonstrate the role of the etiologic factors in the syndrome of condensation of the lung tissue
- to apply the methods of clinical investigation caracteristice for each of the pneumonia
- to integrate the knowledge in the diagnosis sindromal of the syndrome of condensation of the lung tissue.

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution;

## Theme 16. Pleural syndromes

# . Pneumothorax (accumulation of air in the pleural cavity) and hydrothorax (pleural effusion). Exudative pleurisy and the fibrinous pleurisy.

- To define the concepts syndromes pleural.
- to know the changes in the clinical examination of the syndromes pleural.
- to demonstrate the role of the etiologic factors in pneumothorax (accumulation of air in the pleural cavity) and hydrothorax (pleural effusion). pleurisy exudative and the fibrinous pleurisy.
- to apply the methods of clinical investigation caracteristice for each of the syndromes pleural.
- to integrate the knowledge in the diagnosis sindromal in syndromes pleural.

- Definition:
- Epidemiology;
- Etiology;
- Clinical manifestations:
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution:

# Theme 17. Syndrome of lungs cavity. Mediastinal syndromes. Examination of the patient standardized to the CUSIM

- To define the concepts syndrome hollow syndrome and mediastinal.
- to know the changes in the clinical examination of the syndromes cavitary syndrome and mediastinal disorders.
- to demonstrate the role of the etiologic factors in the syndrome hollow syndrome and mediastinal.
- to apply the methods of clinical investigation caracteristice for the syndrome hollow syndrome and mediastinal.
- to integrate the knowledge in the diagnosis sindromal of the syndrome hollow and the syndrome of mediastinal.

- Definition:
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental:
- Evolution;
- Interrogation;
- Inspection;



Edition:	09
Date:	08.09.2021

Objectives	Content units
• general inspection, respiratory, cardiovascular, digestive,	• Palpation;
	• Percussion;
urinary, endocrine systems examination of the	
standardized patient in CUSIM.  Theme 18. Complementary methods of examination of the	Auscultation;     cardiovascular system
• To define the methods of supplementary	Echocardiography
	Fonocardiografia
examination of the cardiovascular system;	Doplerografia
• to know the methods of supplementary examination	Computed tomography
of the cardiovascular system	Compared to hography     Coronary angiography
• to demonstrate practical knowledge in deciphering	Scintigraphy of the myocardium
the methods of supplementary examination of the	Semagraphy of the my ocardiam
cardiovascular system;	
• to apply the knowledge acquired for the	
determination of the changes in the methods of	
supplementary examination of the cardiovascular	
system in patients with disorders of the cardiovascular	
system;	
• to integrate in medical practice objective changes in	
the examination complimentary app sampler of the	
cardiovascular system in patients.	
Theme 19. Cardiac disrrythmias	
To define the concepts disritmiile heart	Definition;
• to know the changes in the clinical examination of the	• Epidemiology;
disritmiilor heart	• Etiology;
• to demonstrate the role of the etiologic factors in	Clinical manifestations;
disritmiile heart	Clinical diagnosis sindromal;
• to apply the methods of clinical investigation	· Methods of paraclinical diagnostic laboratory and
caracteristic for disritmiile heart	instrumental;
	° Evolution;
• to apply the methods of clinical investigation for disritmiile heart	
• to integrate the knowledge in the sindrom diagnosis of	
disritmiilor heart	
Theme 20. The clinical syndrome of arterial hypertension.	
• To define the concepts of the syndrome's clinical	• Definition;
hypertension. essential and secondary hypertension.	<ul><li>Epidemiology;</li><li>Etiology;</li></ul>
<ul><li>hypotension.</li><li>to know the changes in the clinical examination of the</li></ul>	• Clinical manifestations;
syndrome of clinical hypertension. essential and secondary	Clinical mannestations;     Clinical diagnosis sindromal;
hypertension. hypotension.	Methods of paraclinical diagnostic laboratory and
• to demonstrate the role of the etiologic factors in the clinical	instrumental;
syndrome of hypertension. essential and secondary	• Evolution;
hypertension. hypotension.	Ziolation,
• to apply the methods of clinical investigation caracteristice	
** *	
for the clinical syndrome of hypertension. essential and	
** *	
for the clinical syndrome of hypertension. essential and secondary hypertension. hypotension.	
<ul><li>for the clinical syndrome of hypertension. essential and secondary hypertension. hypotension.</li><li>to integrate the knowledge in the diagnosis sindromal of the</li></ul>	

edema. Cord pulmonale acute (TEAP). Chronic pulmonary heart.



Edition:	09
Date:	08.09.2021

## **Objectives**

- To define the concepts sindromuluiclinic of heart failure. acute and chronic heart failure.cardiac asthma. pulmonary edema. acute pulmonary heart (TEAP).chronic pulmonary heart.
- to know the changes in the clinical examination of the syndrome of clinical heart failure, acute and chronic heart failure, cardiac asthma, pulmonary edema, acute pulmonary heart (TEAP), chronic pulmonary heart.
- to demonstrate the role of the etiologic factors in the clinical syndrome of heart failure. acute and chronic heart failure.cardiac asthma. pulmonary edema. acute pulmonary heart (TEAP).chronic pulmonary heart.
- to apply the methods of clinical investigation caracteristice for the clinical syndrome of heart failure, acute and chronic heart failure, cardiac asthma. pulmonary edema. acute pulmonary heart (TEAP), chronic pulmonary heart.
- to integrate the knowledge in the diagnosis sindromal of the syndrome of clinical heart failure. acute and chronic heart failure.cardiac asthma. pulmonary edema. acute pulmonary heart (TEAP).chronic pulmonary heart.

## **Content units**

- Definition:
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental:
- Evolution:

# Theme 22. Articular syndromes. Rheumatic fever. Mitral valvulopaties. Mitral stenosis. Mitral regurgitation. Mitral prolapse. Tricuspid Valvulopaties.

- To define the concepts of valvulopatiile mitral. mitral stenosis. mitral insufficiency. prolapse the mitral. tricuspid valvulopaties.
- to know the changes of the clinical examination in valvulopatiile mitral mitral stenosis. mitral insufficiency, prolapse the mitral tricuspid valvulopaties.
- to demonstrate the role of the etiologic factors in mitral valvulopaties. mitral stenosis. mitral insufficiency. prolapse the mitral. tricuspid valvulopaties.
- to apply the methods of clinical investigation caracteristice for mitral valvulopaties. mitral stenosis. mitral insufficiency. the mitral prolapse. tricuspid valvulopaties.
- to integrate the knowledge in the diagnosis of mitral valvulopaties. mitral stenosis. mitral insufficiency. prolapse the mitral. tricuspid valvulopaties.

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations:
- Clinical diagnosis sindromal;
- $\circ$  Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution;

# Theme 23. Aortic Valvulopaties. The aortic stenosis. Aortic insufficiency. Pulmonary trunk Vvalvulopaties.

- To define the concepts of valvulopatiile mitral. mitral stenosis. mitral insufficiency. prolapse the mitral. tricuspid valvulopaties.
- to know the changes of the clinical examination in valvulopatiile aortic the aortic stenosis. aortic insufficiency. pulmonary trunk valvulopaties.
- to demonstrate the role of the etiologic factors in valvulopatiile aortic. the aortic stenosis. aortic insufficiency. pulmonary trunk valvulopaties.
- to apply the methods of clinical investigation caracteristice for a ortic valvulopaties. the a ortic stenosis. a ortic insufficiency. Valvulopaties of the pulmonary trunk.
- to integrate the knowledge in the diagnosis aortic valvulopaties. the aortic stenosis. aortic insufficiency.

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution:



Edition:	09
Date:	08.09.2021

Objectives	Content units
Valvulopaties of the pulmonary trunk.	
Theme 24. Syndrome of coronary insufficiency. Isch	nemic heart disease, clinical forms. Pathogenesis,
epidemiology, classification. Clinical examination, laborator	
• To define the concepts of syndrome of coronary	Definition;
insufficiency. ischemic heart disease, angina pectoris.	Epidemiology;
• to know the changes of the clinical examination in the	Etiology;
syndrome of coronary insufficiency. ischemic heart disease,	Clinical manifestations;
angina pectoris	Clinical diagnosis sindromal;
• to demonstrate the role of the etiologic factors in the	Methods of paraclinical diagnostic laboratory and
syndrome of coronary insufficiency. ischemic heart disease, angina pectoris.	instrumental; • Evolution;
• to apply the methods of clinical investigation caracteristice	Sevolution,
for the syndrome of coronary insufficiency, ischemic heart	
disease, angina pectoris.	
• to integrate the knowledge in the diagnosis of syndrome of	
coronary insufficiency. ischemic heart disease, angina	
pectoris.	
Theme 25. Acute myocardial infarction. Pathogenes	sis, stages. Clinical examination, laboratory and
instrumental. Complications of miocardial infarction.	
• To define the concepts of acute myocardial infarction.	Definition;
• • to know the changes of clinical examination in acute	• Epidemiology;
myocardial infarction.	• Etiology;
• • to demonstrate the role of the etiologic factors in acute	<ul><li> Clinical manifestations;</li><li> Clinical diagnosis sindromal;</li></ul>
myocardial infarction.	Methods of paraclinical diagnostic laboratory and
• • to apply the methods of clinical investigation caracteristice	instrumental;
for the syndrome of acute myocardial infarction.	• Evolution;
• • to integrate the knowledge in the diagnosis of syndrome	
of acute myocardial infarction.	
Theme 26. Clinical syndromes of endocarditis, myocarditis	<u> </u>
• To define the concepts of clinical syndromes endocarditis,	Definition;
myocarditis, pericarditis.	Epidemiology;
• to know the changes of the clinical examination in clinical	© Etiology;
syndromes endocarditis, myocarditis, pericarditis.	Clinical manifestations;     Clinical diagnostic sindranal.
• to demonstrate the role of the etiologic factors in clinical syndromes endocarditis, myocarditis, pericarditis.	<ul><li> Clinical diagnosis sindromal;</li><li> Methods of paraclinical diagnostic laboratory and</li></ul>
• to apply the methods of clinical investigation caracteristice	instrumental;
for clinical syndromes endocarditis, myocarditis, pericarditis.	• Evolution;
• to integrate the knowledge in the diagnosis of clinical	Diolation,
syndromes endocarditis, myocarditis, pericarditis.	
Theme 27. Clinical syndromes in gastrointestinal tract dis	seases. Examination of patients with gastritis, gastric
and duodenal ulcer disease. Cancer of the gastrointestinal t	<u> </u>
• To define the concepts of clinical syndromes in the	Definition;
gastrointestinal tract disease	Epidemiology;
• to know the changes of the clinical examination in clinical	° Etiology;
syndromes in the gastrointestinal tract disease	Clinical manifestations;
• to demonstrate the role of the etiologic factors in clinical	Clinical diagnosis sindromal;
syndromes in the gastrointestinal tract disease	Methods of paraclinical diagnostic laboratory and
• to apply the methods of clinical investigation caracteristice	instrumental;
for clinical syndromes in the gastrointestinal tract disease	° Evolution;
• to integrate the knowledge in the diagnosis, clinical	

syndromes in the gastrointestinal tract disease



Edition:	09
Date:	08.09.2021

Objectives	Content units

Theme 28. Liver syndromes: jaundice, portal hypertension and liver failure. Chronic hepatitis and liver cirrhosis. Examination of patients with hepatitis and cirrhosis. Supervision and care of patients with disturbances of the functions of the digestive system.

- To define the concepts of the syndromes of the liver: jaundice, portal hypertension and liver failure.
- to know the changes of the clinical examination in the syndromes of the liver: jaundice, portal hypertension and liver failure
- to demonstrate the role of the etiologic factors in syndromes of the liver: jaundice, portal hypertension and liver failure
- to apply the methods of clinical investigation caracteristice for syndromes of liver: jaundice, portal hypertension and liver failure
- to integrate the knowledge in the diagnosis of syndromes of the liver: jaundice, portal hypertension and liver failure

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution:

Theme 29. Clinical syndromes of glomerulonephritis and tubular-interstitial diseases. Acute and chronic glomerulonephritis. Urinary syndrome. Nephrotic syndrome. Renal amyloidosis. Acute and chronic pyelonephritis. Nephrolithiasis. Syndrome of acute and chronic renal failure.

- To define the concepts of clinical syndromes glomerulonephritis and the tubular-interstitial affections.
- to know the changes of the clinical examination in the clinical syndromes of glomerulonephritis and the tubular-interstitial affections
- to demonstrate the role of the etiologic factors in the clinical syndromes of glomerulonephritis and the tubular-interstitial affections
- to apply the methods of clinical investigation caracteristice for the clinical syndromes of glomerulonephritis and the tubular-interstitial affections
- to integrate the knowledge in the diagnosis of clinical syndromes of glomerulonephritis and the tubular-interstitial affections.

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic, laboratory and instrumental:
- Evolution:

Theme 30. Clinical syndromes in endocrine diseases. Examination of patients with disorders of the thyroid gland and in diabetes mellitus. Diabetic comas. Clinical case report (academic).

- To define the concepts of clinical syndromes in endocrine diseases. examination of patients with disorders of the thyroid gland and in diabetes mellitus. comas diabetic.
- to know the changes of the clinical examination in clinical syndromes in endocrine diseases. Examination of patients with disorders of the thyroid gland and in diabetes mellitus. comas diabetic.
- to demonstrate the role of the etiologic factors in clinical syndromes in endocrine diseases. examination of patients with disorders of the thyroid gland and in diabetes mellitus. comas diabetic.
- to apply the methods of clinical investigation caracteristice for clinical syndromes in endocrine diseases. Examination of patients with disorders of the thyroid gland and in diabetes mellitus, diabetic comas .
- to integrate the knowledge in the diagnosis of clinical

- Definition;
- Epidemiology;
- Etiology;
- Clinical manifestations;
- Clinical diagnosis sindromal;
- Methods of paraclinical diagnostic laboratory and instrumental;
- Evolution;



Edition:	09
Date:	08.09.2021

Objectives	Content units
syndromes in endocrine diseases. Examination of patients	
with disorders of the thyroid gland and in diabetes mellitus.	
diabetic comas.	
Clinical case report (academic).	

# VIII. PROFESSIONAL (SPECIFIC (SC)) AND TRANSVERSAL (TC) COMPETENCES AND STUDY OUTCOMES

## **Professional competences (specific) (SC)**

- SC1. To have the possibility to develop a wide range of skills, including research, investigation, analysis, as well as to be able to confront and solve some problems, plan communications, and present team spirit.
- SC2. Knowledge of the methodology of collecting Anamnesis and objective (physical) examination of the patient in the framework of Internal Medicine;
- SC3. Understand the importance of correct interpretation of the results obtained in assessing the functional state of organs and systems in the context of objective examination of the patient classical clinical data (symptoms and signs) of diseases in adults;
- SC4 .Planning, coordinating and carrying out health promotion activities and prophylactic measures to improve health at individual and community level;
- SC5. Knowledge and compliance with the rules of ethics and medical deontology.

# **Transversal competences (TC)**

TC1. Autonomy and responsibility

- the acquisition of moral guidelines, the formation of professional attitudes and civic, allowing students to be fair, honest, neconflictually, cooperating, understanding in the face of suffering, willing to help people, interested in the development of the community;
- to know, respect and contribute to the development of moral values and professional ethics;
- learn to recognize a problem when it arises and provide responsible solutions for solving it.
- TC2. Efficient use of language skills, knowledge in information technologies, skills in research and communication. Employment in extracurricular activities.
- TC3. Development of clinical rationalment.

**Final:** The exam of promotion in the discipline of Internal Medicine semiology are not admitted students with annual average under note 5, as well as students who have not recovered absences from the practical work.

The exam at the discipline of Internal Medicine Semiology (assessment summary) is a combined one, made up of sample multiple-choice test (version "Test Editor" SUMPH "Nicolae Testemitanu") and the written test and the assessment of practical skills. Sample multiple-choice test consists of variants of 50 tests each of the topics of the course of Internal Medicine semiology, of which 20 tests are single, 30 multiple answer tests. The student has a total of 2 hours to answer the test. The test is graded from 0 to 10. The topics practical skills are approved at the meeting of the department and are given to the students before the session.

Assessment knowledge is assessed with marks from 10 to 1 without decimals, as follows:

• Grade 10 or "excellent" (equivalent ECTS - A) will be accordată for însișirea 91-100% of the material:



Edition:	09
Date:	08.09.2021

- Grade 9 or "very good" (equivalent ECTS B) will be given for acquiring 81-90% of the material;
- Grade 8 or "good" (equivalent ECTS C) will be given for assimilation of 71-80% of material;
- Grades 6 and 7 or "satisfactory" (equivalent ECTS D) will be awarded for the assimilation respectively 61-65% and 66-70% dn material;
- Note 5 or "weak" (equivalent ECTS E) will be granted to acquire 51-60 of the material;
- Grades 3 and 4 (equivalent ECTS FX) will be awarded for ăînsușirea 31-40% and respectively 41-50% of the material;
- Grades 1 and 2 or "unsatisfactory" (equivalent ECTS F) will be given for acquiring 0-30% of the material.

The final grade consists of 4 components: the annual average of the X-coefficient 0.3; practical skills X coefficient 0.2; oral exam X-coefficient 0.3; computerized test X coefficient 0.2.

Method of mark rounding at different assessment stages

Intermediate marks scale (annual average, marks from the examination stages)	National Assessment System	ECTS Equivalent
1.00-3.00	2	F
3.01-4.99	4	FX
5.00	5	
5.01-5.50	5,5	${f E}$
5.51-6.0	6	
6.01-6.50	6,5	D
6.51-7.00	7	D
7.01-7.50	7,5	C
7.51-8.00	8	C
8.01-8.50	8,5	В
8.51-8.00	9	
9.01-9.50	9.5	A
9.51-10.0	10	A

The average annual mark and the marks of all stages of final examination (computer assisted, test, oral) - are expressed in numbers according to the mark scale (according to the table), and the final mark obtained is expressed in number with two decimal places, which is transferred to student's recordbook.

The absence from the examination without good ground is recorded as "absent" and is equivalent to 0 (zero). The student has the right to have two re-examinations.

## IX. RECOMMENDED LITERATURE:

## A. Compulsory:

- 1. Internal medicine. Vasilenko V. (engl. verssion) Moscow 1990
- 2. A Guide to Physical Examination and History Taking, Barbara Bates, J.B.Lippincot Company, Phyladelphia, USA
- 3. Clinical medicine a textbook for medical students and doctors ed. By P. J. Kumar, and M. L. Clark.- London, 1987

#### B. Additional

1. Clinical Medicine. Kumar&Clark. VII-th edition. London 2009



Edition:	09
Date:	08.09.2021

Harrison's principle of internal medicine.-New York,2005

- 3. Pocket guide to clinical examination/ O.Epstein a.o.- 2nd ed.- Lon- don: Mosby, 1997
- 4. Harrison's prinsiples of internal medicine self-assessment and board review/ Ed. R. Stone.- 15th ed. Boston:McGraw-Hill, 2002
- 5. Harrison's principles of internal medicine Vol. 1 ed. : D. L. Longo, A. S. Fauci, D. L. Kasper, ... New York,2012
- 6. Harrison's principles of internal medicine Vol. 2 ed. : D. L. Longo, A. S. Fauci, D. L. Kasper, ... New York,2012
- 7. Harrison's gastroenterology and hepatology ed. : D. L. Longo, A. S. Fauci ; associate ed. : C. A. Langford. New York,2013