



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»

Head of education program
«General medicine»



(signature) Khotimchenko Yu.S.
(Full name)
«09» of July 2019

«APPROVED»

Director of the Department of Clinical
Medicine



(signature) Geltser B.I.
(Full name)
«09» of July 2019



WORKING PROGRAM OF ACADEMIC DISCIPLINE (WPAD)

«Propaedeutics in Internal Medicine»

Education program

Specialty 31.05.01 «General medicine»

Form of study: full time

year 2,3, semester 4,5,6
lectures 90 hours
practical classes 162 hours
laboratory works not provided
total amount of in-classroom works 252 hours
independent self-work 108 hours
including preparation to exam 27 hours
control works ()
credit year 2,3, semester 4,5
exam year 3, semester 6

The working program is drawn up in accordance with the requirements of the Federal state educational standard of higher education (level of training), approved by the order of the Ministry of education and science of the Russian Federation from 09.02.2016 № 95.

The working program of the discipline was discussed at the meeting of the Department of fundamental and clinical medicine. Protocol No. 8, 09 of July 2019

Author: c.m.sc. docent Maystrovskaya Y.V.

ANNOTATION

The discipline "Propaedeutics of internal diseases, radiation diagnosis" is intended for students enrolled in the educational program of 31.05.01 "General Medicine", is included in the basic part of the curriculum.

Discipline is implemented in 2, 3 courses in 4, 5, 6 semesters.

In developing the work program of the discipline, the Federal State Educational Standard of Higher Education in the specialty 31.05.01 "General Medicine" was used, the curriculum for preparing students for the General Medicine profile.

The total complexity of the discipline is 360 hours, 10 credit units (lectures - 90 hours, practical exercises - 162 hours, independent work of students - 108 hours).

Developing in students a conscious understanding of the relationship of human health with the environment, factors and living conditions, and labor activity is a necessary prerequisite for their active participation in carrying out scientifically grounded and effective therapeutic measures and preventing diseases.

The study of the basics of therapy is of particular importance in the formation of medical practice, in solving the list of problems in the diagnosis and treatment of diseases cited in the Federal State Educational Standard, in developing students' clinical thinking.

A special feature in the construction and content of the course is the use of active learning methods, software and hardware, a collection of methodological, evaluation and electronic means of discipline support.

The discipline "Propedeutics of internal diseases" is logically and meaningfully connected with such courses as "Human Anatomy", "Histology, Cytology, Embryology", "Basics of Nursing".

The course program is based on the basic knowledge gained by students:

- the ability and willingness to implement ethical and deontological principles in professional activities (GPC 4);

- ability to assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems (GPC -9);

- readiness to ensure the organization of patient care and the provision of primary medical care (GPC 10);

- readiness to provide medical care for sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the life of the patient and do not require emergency medical care (PC 10);

- willingness to participate in the provision of emergency medical care in conditions requiring urgent medical intervention (PC 11).

The purpose of the course: teaching students research methods and rules for diagnosing diseases of internal organs in the course of clinical training of a young specialist - the formation of important professional skills for examining a patient, the basics of clinical thinking, as well as medical ethics and deontology.

Tasks:

- the study of methods for direct examination of the patient (questioning, examination, palpation, percussion, auscultation, blood pressure measurement, the study of the properties of arterial pulses, etc.);

- the study of some methods of laboratory and instrumental diagnosis of diseases of internal organs (general and biochemical analysis of blood, urine tests, studies of pleural contents, sputum tests, stool tests, ECG, echoCG, spirometry, etc.)

- the study of the main clinical symptoms and syndromes of diseases of internal organs and the mechanisms of their occurrence;

- the study of the symptomatology of the most common diseases of internal organs occurring in a typical classical form;

- the formation of ideas about the basic principles of the diagnostic process (the foundations of clinical thinking);

- the formation of ideas about the basic principles of medical ethics and deontology.

Requirements to the results of the implementation of the discipline.

Code and specification of the competence	Stages of competence generation	
Ability and willingness to implement ethical and deontological principles in professional activities (GPC 4)	ow	Kn Behavioral norms during inspection of the patient, ethics and deontology during an interview with the patient and his relatives
	Be able	To observe the rules of conduction when working with the team. To maintain confidentiality when meeting with medical background of the patient, the results of additional methods of examination
	Po ssess	Rules of etiquette to keep medical secrecy
PC – 5 - the readiness to collect and to analyze patient complaints, data of its history, the results of laboratory, instrumental, postmortem and other examinations to recognize the incidence or the absence of diseases	ow	Kn Anatomical, physiological, age and sexual characteristics of a healthy and sick person; the causes of the main pathological processes in the body and the mechanisms of their development; main symptoms and syndromes of internal disease.
	Be able	To make an inquiry of patient condition, patient's present complaints, history of the present disease (anamnesis morbi), past history (anamnesis vitae) To use palpation, percussioin and auscultation techniques for evaluation of heart and lung condition
	Po ssess	Methods of physical examination of the patient; Skills of interpretation of the received data, allocation of symptoms and syndromes of the disease
PC – 8 the ability to determining the tactics of patient surveillance with different nosological entities.	ow	Kn The main clinical symptoms and syndromes of diseases of internal organs and the mechanism of their occurrence; Symptomatology of the most common of internal diseases occurring in a typical classical form; diagnose the main clinical syndromes and justify this diagnosis
	Be able	to present the results of the examination of the patient in the case history
	Po ssess	skills in interpreting the results of general survey, palpation, percussion, auscultation and main instrument and laboratory diagnostic methods

I. STRUCTURE AND CONTENT OF THEORETICAL TRAINING (90 HOURS) SEMESTER 4 (36 HOURS)

Topic 1. Propedeutics to internal medicine: history, definition concept of disease, symptoms, syndromes, methods of physical examination and additional examination (2 hours).

Internal Medicine Propedeutics as an introduction to clinical practice. The history of development Internal Medicine Propedeutics ibroad and abroad. Primary purposes and objects of studies of propedevtic medicine. Basic methods of patients examinnation: physical, instrumental, laboratory.

Topic 2. Case history, the standard framework of interviewing (2 hours).

The basic sections of case history and rules of fulfillment. Basic structural parts of anamnesis (passport data, complaints of patient, review of systems, life history.

Topic 3. Complaints: Chief and additional (2 hours).

Complaints: definition, types, diagnostic meaning

Topic 4. General survey (level of consciousness, position, constitution, fatness, skin and its appendages.) (2 hours)

Method of leadthrough of general inspection of a patient. Determination of the general condition of a patient (variants of the general states of patients and their criteria), estimation of the state of consciousness (types of violations of consciousness), position in a bed (active, passive, forced, types). Body built and basic criteria of normal types of constitutions. Skin, its properties (color, elasticity, humidity, temperature, elements of rash, nevuses, scars) and pathological changes; an estimation of the state of hair and nails. Subcutaneous fat tissue (degree of development, distribution, types of obesity).

Topic 5. General survey (peripheral lymph nodes, muscles, bones, joints) and Local survey (face, neck) (2 hours)

Method of leadthrough and sequence of inspection state of muscles and locomotorium. Sequence of palpation of lymphatic nodes. Diagnostic value of symptoms, obtained during the general inspection of a patient. of head and neck, extremities and trunk, abdomen and thorax. Diagnostic value of symptoms obtained during inspection of separate parts of patent's body.

Topic.6 Lung diseases: complaints, anamnesis morbi, anamnesis vitae, pulmonary inspection (2 hours).

Sequence of obtaining and detalization of major subjective symptoms and their semiologic estimation. Features of obtaining of hisrory of present illness and life history. Method of leadthrough of static and dynamic inspection of a thorax. Determination of topographical areas and physiologic formations on the chest and their diagnostic value. Physiologic and pathologic forms of the chest, their criteria. Pathological forms of breathing (Cheyn-Stock's, Biot's, Kussmaul's, Grokko's respiration), their characteristics and reasons of origin.

Topic. 7 Lung system: palpation (2 hours).

Sequence of leadthrough of pallpation of thorax, determination of the vocal fremitus, and semiologic estimation of results.

Topic. 8 Percussion: meaning, technique, type of sounds, diagnostic value. Lung percussion (2 hours).

History of development of percussion as the method of physical examination. A role of percussion in determination of the state of lungs. Classification of percussion according to aims, theforce of percussion stroke, method of leadthrough. Variants according to conditins of occurrence of pecussion sound.

Topic .9 Lung Auscultation: meaning, technique, type of sounds, diagnostic value. The main respiratory sounds (2 hours).

History of development of auscultation as the method of physical examiation of a patient. Method of adthrough of reference comparative auscultation of lungs. Vesicular (alveolar) breath sounds and bronchial (laryngotracheal) breath sounds. Classification of adventitious respiratory sounds (cracle, wheezes, Pleural Friction Rub). Reasons of origin of dry and moist rales, their variants. Terms of origin of crepitation and pleural friction sound.

Topic 10. Basic laboratory and instrumental methods for diagnosing lung diseases (2 hours).

Diagnostic value of X-ray methods of investigation, determination of external respiration function, laboratory diagnostic methods (sputum examination, blood tests) for detection of diseases of the respiratory system

Topic 11. The main clinical syndromes of respiratory system diseases.

Syndrome of focal consolidation of pulmonary tissue, syndrome of fluid in pleural cavity, syndrome of air accumulation in pleural cavity, syndrome of cavity in the lung, syndrome of an atelectasis (obstructor and compression atelectasis), pulmonary emphysema.

Topic 12. Cardiovascular system diseases (2 hours): complaints, anamnesis morbi, anamnesis vitae, inspection. Sequence of obtaining and detalization of patient's complaints in cardiovascular pathology. Features of anamnesis morbi and anamnesis vitae of patients. Risk factors determination.

Topic 13. Cardiovascular system diseases: observation and palpation of precordial region (2 hours)

Sequence of leadthrough of inspection of heart region. Diagnostic value of cardiac hump-bag, pulsation in the area of heart and neck. Method and technique of palpation of precordial area: apex beat (localization, area, force, height, resistance, dislocation, reasons of origin of negative apex beat).

Topic 14. Examination of pulse (arterial, venous, pseudocapillary) and blood pressure (2 hours).

Vessels, accessible for determination of pulse (arterial, venous). Rules and sequence of research of pulse on a radial artery. Determination of basic properties of pulse (synchronousness, rhythm, frequency, tension, filling, height, speed, evenness), exposure of pulse deficit, lability. Pardoxic and dicrotic pulse.

Topic 15. Cardiovascular system diseases: percussion (2 hours).

Technic, diagnostic meaning. Percussion of borders of relative and absolute heart dullness, determination of vascular bundle.

Topic 16. Cardiovascular system: auscultation of a heart (2 hours).

Normal heart sounds, splitting and reduplication of heart sounds, adventitious sounds (tipple rrhythm, gallop rrhythm).

Topic 17. Auscultation of a heart: organic and functional heart murmurs (2 hours).

Reasons of origin and classification of cardiac murmurs (intracardial and extracardial, organic and functional, systolic and diastolic, ejectional and regurgitational). Rules of auscultation and algorithm of characteristics of murmurs of heart: relation toward the phases of cardiac activity.

Topic 18. Basic laboratory and instrumental methods for diagnosing cardiovascular system diseases (2 hours).

Electrocardiographic method of research of cardiac functions. Method of ECG registration and decoding. Clinical and diagnostic value of method of electrocardiography. Biophysical and physiologic bases of ECG. Structure and function of heart pacemakers and conductive system. Basic and additional ways of impulse conduction.

Semester 5 (36 HOURS)

Topic 1. Main complaints of patient with gastrointestinal diseases, features of disease history and life history (2 hours).

Sequence of obtaining and detalization of patient's complaints in gastrointestinal system pathology. Features of anamnesis morbi and anamnesis vitae of patients.

Topic 2. The physical examination of gastrointestinal system (2 hours).

The main rules of oral cavity, abdominal examination, goals and rules of superficial and deep palpation

Topic 3. The instrumental and laboratory investigation of gastrointestinal system (2 hours). The most common methods of gastrointestinal system investigation: endoscopy, X-ray examination with standard barium meal, Ultrasound and CT scanning. The endoscopy signs of erosion and ulcer of stomach and duodenum.

Blood and stool tests and their meaning

Topic 4. Main complaints of patient with hepatobiliary system diseases, features of disease history and life history. The examination of hepatobiliary

system (2 hours). Sequence of obtaining and detalization of patient's complaints in hepatobiliary system pathology. Features of anamnesis morbi and anamnesis vitae of patients. Methods of palpation and percussion of liver, main rules.

Topic 5. Laboratory and instrumental investigation of hepatobiliary system (2 hours).

Bilirubin metabolism, types of jaundice. The value of biochemical analysis in diagnosis of hepatobiliary system diseases. Ultrasound, computed tomography scan, magnetic resonance imaging, upper GI endoscopy as methods of liver investigation.

Topic 6. The main clinical syndromes of hepatobiliary system diseases (2 hours).

Syndrome of biliary dyspepsia, jaundice, portal hypertension, hepatic encephalopathy, syndrome of hepatic insufficiency, main clinical and laboratory symptoms.

Topic 7. Main complaints of patient with renal diseases, features of disease history and life history. The physical examination of renal system (2 hours).

Sequence of obtaining and detalization of patient's complaints in renal system diseases. Features of anamnesis morbi and anamnesis vitae of patients. General survey of patient, kidney palpation technique.

Topic 8. Laboratory and instrumental investigation of renal system (2 hours).

Urine analysis, its value in diagnosis of renal system diseases. Nechiporenko's method, Zimnitsky's test technique and diagnostic value. Glomerular filtration rate in detection of chronic kidney failure disease. Plain X-ray, cystoscopy, excretion urography, ultrasonography, renal angiography, computed tomography, magnetic resonance imaging using in diagnosis of renal system diseases.

Topic 9. The main clinical syndromes of renal system diseases (2 hours).

Urinary syndrome, renal edema, nephrotic syndrome, renal arterial hypertension, acute and chronic renal failure, clinical features and laboratory exams.

Topic 10. Main complaints and examination of endocrine system (2 hours).

Etiology and pathogenesis of endocrine disorders, types of disorders. Patient's complaints, Features of anamnesis morbi and anamnesis vitae of patients. General examination of patient. Thyroid palpation.

Topic 11. Laboratory and instrumental investigation of endocrine system (2 hours).

Tests of the thyroid function Tests of the thyroid function, radioactive iodine uptake in diagnosis of thyroid disorders. Glucose tolerance test, plasma glucose, glucosuria, glycosylated hemoglobin in diagnosis of diabetes mellitus. Laboratory tests used to evaluate nutritional status Laboratory tests used to evaluate nutritional status Laboratory tests used to evaluate nutritional status. CT and MRT, ultrasound in detection of endocrine disorders.

Topic 12. Examination of patient with the blood system disorders (2 hours).

Main complaints of patients with pathology of blood system, Features of anamnesis morbi and anamnesis vitae of patients. General survey of patient.

Topic 13. Added methods of investigation in hematology (2 hours).

Conception of hemopoiesis. General blood analysis. Sternal puncture, trepanobiopsy in diagnosis of blood diseases.

Topic 14. The main syndromes in hematology (2 hours).

Syndrome of anemia, myelodysplastic syndrome, disorders of vascular hemostasis, leucosis.

Topic 15 Examination methods and semiotics of allergy manifestations (2 hours). Conception of allergy. Collection of complaints, anamnesis, objective examination of patients with allergy.

Topic 16. Additional methods of examination in allergology. Basic syndromes in allergology. Anaphylactic shock, urticaria and angioedema. Diagnostic tests: (scratch) skin test, intradermal test, provocative challenge tests.

Topic 17. Diagnostics of inflammatory and degenerative diseases of locomotor system (2 hours).

Topic 18. Joint syndromes (arthritic, osteoarthritic) (2 hours).

6 Semester (18 HOURS)

Topic 1. Pneumonia, pleurisy. Etiology, classification, clinical features (physical examination, laboratory and instrumental testing) (2 hours).

Topic 2. Bronchial asthma, chronic obstructive pulmonary disease (2 hours). Etiology, classification, clinical features (physical examination, laboratory and instrumental testing).

Topic 3. Acute rheumatic fever, Infective endocarditis (2 hours): causes and pathogenesis, pathological changes of tissues, clinical features (complaints, physical examination, laboratory and instrumental testing).

Topic 4. Heart valves diseases (2 hours): definition, causes, changes of hemodynamics due to heart valves diseases, clinical features, instrumental testing.

Topic 5. Arterial hypertensy and symptomatic arterial hypertension (2 hours). Risk factors of arterial hypertension. Classification of arterial hypertension. Arterial Hypertension, clinical features (complaints, physical examination, laboratory and instrumental testing). Complications. Hypertensive crisis. Secondary hypertension, classification, clinical features.

Topic 6. Ischemic heart disease (2 hours).

Definition, classification, causes, risk factord, clinical features, instrumental testing. Ischemic heart disease, risk factors of ischemic heart disease. Classification of ischemic heart disease .Stenocardia: clinical features (complaints, physical examination). Grading of stable stenocardia. Myocardial infarction: classification, complaints, physical examination. 8. Myocardial infarction: ECG features, laboratory testing, complications.

Topic 7. Gastritis. Stomach and duodenal ulcer (2 hours).

Classification of chronic gastritis. Chronic gastritis: clinical features (complaints, physical examination, laboratory and instrumental testing). Gastric ulcer and duodenal ulcer: clinical features (complaints, physical examination, laboratory and instrumental testing). Complications of gastric and duodenal ulcer.

Topic 8. Hepatitis and cirrhosis (2 hours).

Causes and pathogenesis of hepatitis and cirrhosis. Classification of chronic hepatitis. Clinical features of different forms of chronic hepatitis. Classification of liver cirrhosis. Clinical features of different forms of liver cirrhosis. 8. Diagnostics of liver cirrhosis.

Topic 9. Acute and chronic glomerulonephritis. Pyelonephritis (2 hours)

Glomerulonephritis: clinical features (complaints, physical examination, laboratory and instrumental testing). Pyelonephritis, clinical features (complaints, physical examination, laboratory and instrumental testing).

II. STRUCTURE AND CONTENT OF PRACTICAL TRAINING

PRACTICAL TRAININGS (108 HOURS)

Module I. Subjective methods of examination of the patient. (18 hours)

Lessons 1. Introduction in Propedeutics to internal medicine. Case history (4 hours)

Health and disease definition. Symptoms and signs of disease. Diagnosis structure. Basic methods of patients examination: physical, instrumental, laboratory. Case history structure.

Lessons 2. Case history. Complaints. (4 hours)

Case history, main departments, diagnostical meaning. Complaints: main and additional, general complaints. Complaint detalisation. Control test. Fragment of case history writing.

Lessons 3-4. General survey (8 hours)

Method of leadthrough of general inspection of a patient. Determination of the general condition of a patient, estimation of the state of consciousness, position in a bed. Body built and basic criteria of normal types of constitutions. Skin, its properties and pathological changes; an estimation of the state of hair and nails. Subcutaneous fat tissue. Sequence of palpation of lymphatic nodes. sequen of inspection state of muscles and locomotorium, of head and neck, extremities and trunk, abdomen and thorax. Practical skills training. Test control.

Lessons. 5 The control task of module knowledge. Demonstration of practical skills, writing tests (2 hours)

Module 2. Methods of examination of patient with respiratory system diseases (24 hours).

Lessons 6. Complaints of patient with respiratory system diseases, anamnesis morby, anamnesis vitae, pulmonary inspection (4 hours).

Main complaints: dyspnoea, cough, bloody expectorations, pain in the chest, detalisation of complaints, static inspection of the chest (shape of chest) and dynamic inspection (rate, rhythm, depth and quality.)

Lessons 7. Palpation of chest (4 hours).

The method of palpation, technique of palpation, dgnostic meaning. Sequence of leadthrough of pallpation of thorax, determination of the vocal fremitus, and semiologic estimation of results. Practical skills training. Test control.

Lesson 8. Method of percussion, the rules and technique of comparative percussion and topographic percussion (4 hours).

Physical buckgrounds of percussion. Type of percussion sounds (Resonant Vesicular, Tympanic, Dull), the mechanism of sounds development. Cause of pathological souns in the lung. Topographic percussion: rules of percussion, determination of the upper and lower lungs borders and their mobility. Practical skills training. Test control.

Lesson 9. Method of auscultation. Lung auscultation, diagnostic meaning auscultation (4 hours).

Physical buckgrounds of auscultation. Respiratory Sound characteristics, normal (Vesicular and bronchial Breathing) and adventitious respiratory sounds (Crackles, Wheeze and pleural friction rab). Changes of normal sound in pathological condition of lung. Practical skills training. Test control.

Lesson 10. Laboratory and functional methods of diagnostostics of respiratory system diseases (4 hours).

Method of x-ray diagnostics of diseases of the lungs (radiography in frontal and lateral projections, computed tomography), spirometry, bronchoscopy. Method of Investigations of sputum including bacteriological examination, cell

differentiation, including eosinophils, and measurement of various inflammatory mediators; serological tests for confirming particular infections. Test control.

Lesson 11. The main clinical syndromes of respiratory system diseases. The control task. Demonstration of practical skills, writing tests (2 hours)

Syndrome of focal consolidation of pulmonary tissue, syndrome of fluid in pleural cavity, syndrome of air accumulation in pleural cavity, syndrome of cavity in the lung, syndrome of an atelectasis (obstructor and compression atelectasis), pulmonary emphysema.

Module 3. Methods of examination of patient with cardiovascular system diseases (26 hours).

Lessons 12-13. Complaints of patient with cardiovascular system diseases, anamnesis morbi, anamnesis vitae, precordial observation and palpation of precordial region. Examination of pulse (arterial, venous, pseudocapillary) and blood pressure (8 hours).

Main complaints of patient with cardiovascular system diseases (pain or discomfort in the centre of the chest, dyspnoea, irregular heartbeat, cardiac oedema).

Risk factors of cardiovascular diseases, features of anamnesis morbi and vitae.

Purpose of precordial observation and palpation of precordial region: apex impulse (location, size, and character, which includes duration, force, and contour, clinical significance); parasternal impulse; other impulses. Practical skills training. Test control.

Lesson 14. Percussion of borders of absolute and relative dullness of the heart. Semiotics of percussive findings (4 hours).

Rules and techniques of percussion; changes of border in patient with cardiovascular system, clinical significance. Practical skills training. Test control.

Lesson 15-16. Auscultation of heart: technique and clinical significance (8 hours)

Heart sounds, physical backgrounds; points to hear the heart valves; physiological and pathological changes of heart sounds. Murmurs: physical backgrounds, clinical

characteristics, diagnostic meaning. Auscultation technique Practical skills training. Test control.

Lesson 17. Laboratory and functional methods of diagnostics of cardiovascular diseases (4 hours)

Electrocardiogram: limb, augmented limb, precordial limb, waves and intervals , clinical significance. 24-hours holter monitoring and blood pressure monitoring : purpose, procedure and result Echocardiography, ultrasound or radiological evidence of atherosclerotic plaque (carotid, iliac and femoral arteries, aorta), diagnostic meaning. Laboratory methods of cardiovascular system diagnostic: cholesterol level, biochemical tests in myocardial infarction and ischaemia . Test control.

Lesson 18. The control task. Demonstration of practical skills, writing tests (2 hours)

5 SEMESTER (54 HOURS)

Module IV. Examination of patient with gastrointestinal and hepatobiliary diseases. (24 hours)

Lessons 1-2. Examination of patient with gastrointestinal diseases (8 hours).

Main complaints of patient with gastrointestinal system diseases (abdominal pain, anorexia and weight loss, heartburn, dysphagia, nausea, vomiting, abdominal distension, diarrhea, bleeding). Risk factors of gastrointestinal diseases, features of anamnesis morbi and vitae. General examination of patient. Superficial and deep palpation. Practical skills training. Test control. Fragment of case history writing. Fragment of case history writing.

Lessons 3. Instrumental and laboratory testing of gastrointestinal diseases (4 hours). Gastric analysis. The methodology of this procedure. pH-metria Tests for Helicobacter pylori infection. X-ray studies of the stomach and duodenum. Esophagoscopy, upper gastrointestinal endoscopy, colonoscopy, sigmoidoscopy, ultrasound study and CT scanning. Feces analysis. Control test.

Lessons 4. The examination of hepatobiliary system (4 hours). The main complaints of patients with diseases of liver and biliary tract. General inspection of patients with liver diseases. Percussion of the liver. Palpation of liver and gallbladder. Demonstration of practical skills, writing tests.

Lessons 5. Instrumental and laboratory testing of hepatobiliary system diseases (4 hours). Indices of proteins, lipids, carbohydrates metabolism, normal values, changes due to liver diseases. The diagnostic meaning of the enzyme activity in liver and gallbladder diseases, normal values. Bilirubin metabolism, classification and diagnostic of different types of jaundice. The diagnostic value of cholecystogram, intravenous cholangiography, ultrasound study, isotopes scans, laparoscopy.

Lesson 6. The main clinical syndromes of hepatobiliary system diseases (4 hours). Portal hypertension, hepatosplenomegaly, syndrome of hepatocytes cytolysis, hepato-cellular failure, mesenchymal inflammation of liver, hepatorenal syndrome, hemorrhagic syndrome.

Module V. Methods of examination of patient with renal system diseases (12 hours).

Lessons 7. Complaints of patients with diseases of renal system. Examination of patient with renal system diseases (4 hours).

Complaints of patients (pain, abnormalities in urine volume and composition, arterial hypertension, edema). General inspection of patients with diseases of renal system. Palpation of kidney and urinary bladder. Detection of Pasternatskij sign. Practical skills training. Test control.

Lesson 8. Laboratory and instrumental methods of renal system disease investigation (4 hours).

Urine analysis: assessment of physical properties (color, appearance, smell, quantity, specific gravity), chemical examination (pH, glucose, ketones, protein, bilirubine, urobilinogen), microscopical examination (RBC number, WBC number, casts, crystals, bacteria, epithelial cells). The Zimnitsky functional test. The

Nechiporenko urine analysis. Blood test and biochemical blood test, changes of them due to kidney diseases. Plain X-ray, cystoscopy, excretion urography, ultrasonography, renal angiography, computed tomography and magnetic resonance imaging, their value in diagnostics of renal diseases.

Lesson 9. (4 hours). The main syndromes in nephrology

Urinary syndrome, renal edema, nephrotic syndrome, renal arterial hypertension, acute renal failure, chronic renal failure. Test control.

Module VI. Examination of patient with endocrine system disorders, blood diseases, allergosises, joint syndromes.

Lesson 10. Endocrine system disorders. Examination of patients with endocrine system diseases (4 hours).

Complaints of patients with endocrine diseases. Palpation of thyroid gland. Physical examination of patients with endocrine diseases. Diabetes mellitus. Diseases of thyroid gland. Laboratory and instrumental testing. Laboratory and instrumental testing. Test control. Practical skills. History case writing.

Lesson 11 (4 hours).

Complaints of patients with diseases of blood. Physical examination of patients with diseases of blood. Palpation of lymphatic glands. Palpation of spleen. Blood test. Anemia. Leukemia. Hemorrhagic syndrome

Lesson 12 (4 hours).

Allergosises: pollinosis, urticaria, Quincke's edema, anaphylactic shock. First aid in anaphylactic shock, in apparent death.

Lesson 13 (4 hours) Diagnostics of inflammatory and degenerative diseases of locomotor system. Joint syndromes (arthritic, osteoarthritic).

Complaints of patient with joint syndromes, physical examination, laboratory and instrumental testing.

Lesson 14. The control task. Demonstration of practical skills, writing tests (2 hours)

6 SEMESTER (54 HOURS)

Lesson 1. Pneumonia, pleurisy (4 hours).

Pneumonia: causes, risk factors, complaints and history of present illness, clinical features, laboratory and instrumental testing by stages of the disease. Pleurisy: causes, clinical features: complaints, physical examination, laboratory and instrumental testing. Test control. Fragment of case history writing.

Lesson 2. Bronchial asthma, emphysema of lungs (4 hours).

Bronchial asthma: risk factors, classification, clinical features (complaints, physical examination, laboratory and instrumental testing). Emphysema of lungs: causes, risk factors, classification, clinical features (complaints, physical examination, laboratory and instrumental testing). Test control. Fragment of case history writing.

Lesson 3. Chronic chronic obstructive pulmonary disease (4 hours).

Chronic chronic obstructive pulmonary disease: risk factors, classification, clinical features (complaints, physical examination, laboratory and instrumental testing). Test control. Fragment of case history writing.

Lesson 4. Acute rheumatic fever, Infective endocarditis (4 hours).

Acute rheumatic fever: causes and pathogenesis, pathological changes of tissues. clinical features (complaints, physical examination). Rheumatic fever: arthritis, carditis, clinical features. Rheumatic fever: laboratory and instrumental testing. Infective endocarditis: definition, causes, risk factors, classification, complaints, physical examination, laboratory and instrumental testing, complications. Test control. Fragment of case history writing.

Lesson 5. Heart valves diseases. Mitral valves diseases (4hours).

Mitral Stenosis: definition, causes, changes of hemodynamics due to mitral stenosis, complaints, physical examination, laboratory and instrumental testing. Mitral regurgitation: definition, causes, changes of hemodynamics due to mitral regurgitation, complaints, physical examination, laboratory and instrumental testing.

Test control. Fragment of case history writing.

Lesson 6. Heart valves diseases. Aortic valves diseases (4hours).

Aortic stenosis: definition, causes, changes of hemodynamics due to aortic stenosis, complaints, physical examination, laboratory and instrumental testing. Aortic regurgitation: definition, causes, changes of hemodynamics due to aortic regurgitation, complaints, physical examination, laboratory and instrumental testing.

Test control. Fragment of case history writing.

Lesson 7. Arterial hypertension and symptomatic arterial hypertension (4 hours).

Arterial Hypertension, clinical features (complaints, physical examination, laboratory and instrumental testing). Factors influencing blood pressure. Risk factors of arterial hypertension. Classification of arterial hypertension. Arterial Hypertension, clinical features (complaints, physical examination, laboratory and instrumental testing), complications. Hypertensive crisis: definition, complaints, physical examination, first aid. Symptomatic hypertension, classification, clinical features. Test control. Fragment of case history writing.

Lesson 8-9. Ischemic heart disease (8 hours)

Atherosclerosis: definition, atherogenesis. Risk factors of atherosclerosis. Ischemic heart disease, risk factors of ischemic heart disease. Classification of ischemic heart disease. Stenocardia: clinical features (complaints, physical examination). Grading of stable stenocardia. Stenocardia: laboratory and instrumental testing (ECG, stress testing (exercise and pharmacologic), echocardiography, radionuclide imaging, coronary arteriography). 7. Myocardial infarction: classification, complaints, physical examination. Myocardial infarction: ECG features. Myocardial infarction: laboratory testing. Myocardial infarction: complications. Heart failure: definition, classification, causes. Systolic dysfunction and diastolic dysfunction: definition, mechanism of appearance. Complaints, Physical examination. Test control. Fragment of case history writing.

Lesson 10. Gastritis. Stomach and duodenum ulcer, pancreatitis (4 hours).

Acute gastritis: causes, clinical features (complaints, physical examination, laboratory and instrumental testing). Classification of chronic gastritis. Chronic gastritis: clinical features (complaints, physical examination, laboratory and instrumental testing). Gastric ulcer and duodenal ulcer: clinical features (complaints, physical examination, laboratory and

instrumental testing). Complications of gastric and duodenal ulcer. Test control. Fragment of case history writing.

Lesson 11. Hepatitis and chirossis, Cholecystitis (4 hours).

Causes and pathogenesis chronic hepatitis. Classification of chronic hepatitis, clinical features of different forms of chronic hepatitis. Causes and pathogenesis of liver cirrhosis, classification of liver cirrhosis, clinical features of different forms of liver cirrhosis, diagnostics of liver cirrhosis. Causes and pathogenesis of chronic cholecystitis, clinical features of chronic cholecystitis (complaints, physical examination, laboratory and instrumental testing). Test control. Fragment of case history writing.

Lesson 12. Chronic glomerulonephritis. Pyelonephritis (4 hours)

Causes and pathogenesis chronic glomerulonephritis. Classification of chronic glomerulonephritis, clinical features (complaints, physical examination, laboratory and instrumental testing). Clinical features (complaints, physical examination, laboratory and instrumental testing) in patients with pyelonephritis. Test control. Fragment of case history writing.

Lesson 13. Diabetes mellitus (4 hours).

Diabetes mellitus: classification, causes, risk factors. Clinical features of diabetes mellitus type I and type II (complaints, physical examination, laboratory testing). Complications of diabetes mellitus. Diabetic coma. Hypoglycaemic coma. First aid. Test control. Fragment of case history writing.

Lesson 14. Demonstration of practical skills, writing tests (2 hours)

IV. TRAINING AND METHODOLOGICAL SUPPORT OF INDIVIDUAL WORK OF TRAINEES.

There is the main content of those evaluation tools: terms and concepts necessary for the development of the discipline.

During the assimilation of the course « Propaedeutics in Internal Medicine » students have to do a lot of individual work, which includes preparation for seminars and writing an essay.

Practical exercises help students to learn study material deeper, to acquire the skills of creative work on the documents and primary sources.

Plans for practical training, their subject, recommended literature, the purpose and objectives of its study are reported by lecturer in introductory classes, or in a training program in the discipline.

Before preparations for the practical class, you must first of all refer to the lecture notes, sections of textbooks and teaching aids, to get a general idea of the location and the meaning of the theme in the study course. Then, you should work with additional literature, make a record using the recommended sources.

In the process of studying the recommended material it is necessary to understand the construction of the subject, to identify the main provisions, to follow their logic and thereby grasp the essence of the problem being studied.

It is necessary to keep records of the studied material in the form of a synopsis, because it switches on visual, motor memory and allows you to accumulate individual subsidiary fund for quick repetition, to mobilize existing knowledge. The main forms of records: plan (simple and detailed), extracts, and abstracts.

In preparation it is important to compare sources, to think of the material under study and build an algorithm of actions, to consider your oral presentation carefully.

Academic provision of individual work of «Propaedeutics in Internal Medicine » students on the subject is presented in Appendix 1 and includes:

- characterization of reference for students' individual work and guidelines for their implementation;
- requirements for the presentation and registration of results of individual work;
- criteria for assessing the performance of individual work.

V. CONTROL OF COURSE GOALS' ACHIEVEMENT.

№	Controlled modules / topics /	Codes and stages of	Assessment tools
---	-------------------------------	---------------------	------------------

	subjects	competence	run-time control		interim attestation
1	Module 1 Subjective methods of examination of the patient Module 5 Methods of examination of patient with renal system diseases Module 6 Examination of patient with endocrine system disorders, blood diseases, allergoses, joint syndromes.	Ability and willingness to implement ethical and deontological principles in professional activities (GPC 4)	Know	Interviewing	Interviewing
			Be able	Tests, written essay	Tests, written essay
			Posses s	Situational task Individual task	Situational task Individual task
2	Module 2 Methods of examination of patient with respiratory system diseases Module 6 Examination of patient with endocrine system disorders, blood diseases, allergoses, joint syndromes. Module 7. Special propedeutics of internal diseases	PC – 5 - the readiness to collect and to analyze patient complaints, data of its history, the results of laboratory, instrumental, postmortem and other examinations to recognize the incidence or the absence of diseases	Know	Interviewing	Interviewing
			Be able	Tests, written essay	Tests, written essay
			Posses s	Situational task Individual task	Situational task Individual task
3	Module 3 Methods of examination of patient with cardiovascular system diseases Module 4 Examination of patient with gastrointestninal and hepatobiliary diseases Examination of patient with gastrointestninal and hepatobiliary diseases	PC – 8 the ability to determining the tactics of patient surveillance with different nosological entities	Know	Interviewing	Interviewing
			Be able	Tests, written essay	Tests, written essay
			Posses s	Situational task Individual task	Situational task Individual task

V. LIST OF EDUCATIONAL LITERATURE AND INFORMATION AND METHODOICAL MAINTENANCE OF DISCIPLINE

Main course literature:

1. Internal Medicine / Springer International Publishing Switzerland 2017
<https://link.springer.com/book/10.1007/978-3-319-39747-4#authorsandaffiliationsbook>
2. Approach to Internal Medicine / Springer Science+Business Media, LLC 2011
<https://link.springer.com/book/10.1007/978-1-4419-6505-9#authorsandaffiliationsbook>

3. General Medicine and Hospital Medicine: The Janus of Internal Medicine / Springer US 2017 <https://link.springer.com/article/10.1007/s11606-017-4182-z>
4. Textbook of Hyperbaric Medicine / Springer International Publishing AG 2017 <https://link.springer.com/book/10.1007/978-3-319-47140-2#authorsandaffiliationsbook>

Additional literature

1. Clinical Pathways in Emergency Medicine / Springer India 2016 <https://link.springer.com/book/10.1007/978-81-322-2710-6#editorsandaffiliations>
2. Family Medicine / Springer Science+Business Media LLC 2017 <https://link.springer.com/referencework/10.1007/978-1-4939-0779-3#editorsandaffiliations>

Regulatory documents

1. Federal Law of 30.03.1999 N 52-Φ3 “On the sanitary-epidemiological well-being of the population”.
2. Federal Law of the Russian Federation of 21.11.2011 N 323-Φ3 “On the basis of the protection of public health in the Russian Federation”.
3. Order of the Ministry of Health and Social Development of the Russian Federation dated July 23, 2010 No. 541n “On approval of a single qualification directory of managers, specialists and employees, section “Qualification characteristics of employees in the health sector”.
4. Order of the Ministry of Health and Social Development of the Russian Federation of December 24, 2010 No. 1183n “On Approval of the Procedure for Providing Medical Care to the Adult Population of the Russian Federation in Diseases of the Therapeutic Profile”

5. Order of the Ministry of Health and Social Development of the Russian Federation of April 16, 2010 No. 243n "On the organization of the Procedure for the provision of specialized medical care"

6. Standards and protocols for the management of therapeutic patients approved by the Ministry of Health and Social Development

The list of resources information and telecommunications network "Internet"

1. <http://www.ramn.ru/> Russian Academy of Medical Sciences
2. <http://www.scsml.rssi.ru/> Central Scientific Medical Library
3. <http://www.med.ru/> Russian medical server
4. <http://www.aha.ru/~niinf/> Research Institute of Normal Physiology named after PK Anokhin Russian Academy of Medical Sciences
5. <http://www.cardiosite.ru/> All-Russian Scientific Society of Cardiology
6. <http://www.gastro-online.ru/> Central Research Institute of Gastroenterology
7. <http://www.endocrincentr.ru/> Endocrinological Research Center of the Russian Academy of Medical Sciences
8. www.Consilium-medicum.com Journal "Consilium-medicum"
9. www.rmj.ru Russian Medical Journal
10. <http://www.nlm.nih.gov/> National Library of Medicine
11. <http://www.bmj.com/> British Medical Journal
12. <http://www.freemedicaljournals.com/> Free Medical Journals
13. www.cochrane.ru Cochrane Collaboration
14. <http://www.nature.com/ajh/journal/> American Journal of Hypertension
15. <http://elibrary.ru> Scientific Electronic Library
16. <http://www.nature.com> Nature Magazine

LIST OF INFORMATION TECHNOLOGIES AND SOFTWARE

The location of the computer equipment on which the software is installed, the number of jobs	List of licensed software
<p>Multimedia auditorium Vladivostok Russian island, Ayaks 10, building 25.1, RM. M723 Area of 80.3 m2 (Room for independent work)</p>	<p>Windows Seven enterprise SP3x64 Operating System Microsoft Office Professional Plus 2010 office suite that includes software for working with various types of documents (texts, spreadsheets, databases, etc.); 7Zip 9.20 - free file archiver with a high degree of data compression; ABBYY FineReader 11 - a program for optical character recognition; Adobe Acrobat XI Pro 11.0.00 - software package for creating and viewing electronic publications in PDF; WinDjView 2.0.2 - a program for recognizing and viewing files with the same format DJV and DjVu.</p>

In order to provide special conditions for the education of persons with disabilities all buildings are equipped with ramps, elevators, lifts, specialized places equipped with toilet rooms, information and navigation support signs

VI. LOGISTICS DISCIPLINE

For practical work, as well as for the organization of independent work, students have access to the following laboratory equipment and specialized classrooms that meet the current sanitary and fire regulations, as well as safety requirements during training and scientific and industrial works:

Name of the equipped rooms and rooms for independent work	List of main equipment
The computer class of the School of biomedical AUD. M723, 15 work places	Screen, electrically 236*147 cm to trim the screen; Projector DLP technology, 3000 ANSI LM, WXGA with 1280x800 resolution, 2000:1 Mitsubishi EW330U; Subsystem of specialized mounting equipment course-2007 Tuarex; Subsystem of videocommunity: matrix switch DVI and DXP 44 DVI Pro advertising; extension cable DVI over twisted pair DVI 201 TX/RX advertising; Subsystem of audiocommentary and sound; speaker system for ceiling si 3ct LP Extron on from; digital audio processor DMP 44 LC the Extron; the extension for the controller control IPL T CR48; wireless LAN for students is provided with a system based on 802.11 a/b/g/N 2x2 MIMO(2SS) access points. Monoblock HP Loope 400 all-in-one 19.5 in (1600x900), core i3-4150t, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, and a DVD+ / -RW, GigEth, Wi-Fi and BT, the USB port of roses/MSE, Win7Pro (64-bit)+Win8.1Pro(64-bit), 1-1-1 Wty
Multimedia audience	AIO PC HP ProOne 400 G1 AiO 19.5" Intel Core i3-4130T 4GB DDR3-1600 SODIMM (1x4GB)500GB; Screen projection Projecta Elpro Electrol, 300x173 cm; Multimedia projector, Mitsubishi FD630U, 4000 ANSI Lumen 1920 x 1080; Flush interface with automatic retracting cables TLS TAM 201 Stan; Avervision CP355AF; lavalier Microphone system UHF band Sennheiser EW 122 G3 composed of a wireless microphone and receiver; Codec of videoconferencing LifeSizeExpress 220 - Codeconly - Non-AES; Network camera Multipix MP-HD718; Two 47 " LCD panels, Full HD, LG M4716CCBA; audio commutation and sound amplification Subsystem; centralized uninterruptible power supply
Reading rooms of the Scientific library of the University open access Fund (building a - 10)	Monoblock HP Loope 400 All-in-One 19.5 in (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD+/-RW,GigEth,wifi,BT,usb kbd/mse,Win7Pro (64-bit)+Win8.1Pro(64-bit),1-1-1 Wty Speed Internet access 500 Mbps. Jobs for people with disabilities equipped with displays and Braille printers.; equipped with: portable reading devices flatbed texts, scanning and reading machines videovelocitly with adjustable color spectrums; increasing electronic loops and ultrasonic marker
Accreditation-simulation center of the school of Biomedicine	



THE MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN
FEDERATION
Federal State autonomous education institution of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

**TRAINING AND METHODOLOGICAL SUPPORT
INDEPENDENT WORK OF TRAINEES**

in discipline «**Propaedeutics in Internal Medicine**»
Educational program
Preparation for 31.05.01. General Medicine
Form of training full-time

**Vladivostok
2018**

Independent work includes:

1. Library and homework with educational literature and lecture notes,
2. Preparation for practical exercises,
3. Performance of an individual task
4. Preparation of the essay
5. Preparation for testing and control interview.

The procedure for the performance of independent work by students is determined by the schedule of independent work on the academic discipline.

Schedule of independent work on the academic discipline

N p/ p	Date / Deadline	Type of independent work	Estimated time to complete (hour)	Form of control
4 semester				
1	2-3 week	Essay Individual task	6	EO-3-Report, speaking on the practical class
2	4-15 week	Presentation on the essay Presentation of the results of an individual task	6	EO-3-Report, speaking on the practical class
3	17-18 week	Preparing to pass-fail exam	6	EO-1-Interview PW-1 - Test
5 semester				
1	2-3 week	Essay	18	EO-3-Report, speaking on the practical class
2	4-15 week	Presentation on the essay	18	EO-3-Report, speaking on the practical class
3	17-18 week	Preparing to pass-fail exam	18	EO-1-Interview PW-1 - Test
6 semester				
1	2-3 week	Essay	27	EO-3-Report, speaking on the practical class
2	4-15 week	Presentation on the essay	27	EO-3-Report, speaking on the practical class
3	17-18 week	Preparing to exam	54	EO-1-Interview PW-1 - Test

VII. Individual work (27 hours).

Panel of types of Students' Individual Work.

Working through lectures and prepare for practical training, preparation of a report on a selected aspect of the topics of practical lessons or practical material selection to participate in the discussion constitute the content of students' individual work. The material for the preparation may be lecture notes, professional literature, training and methodological support of the discipline. The forms of monitoring: a survey, group discussion, learning the history of the disease, control tasks, the presentation of the report.

Search and explore of new sources of the theoretical and applied social Internet resource management.

Forms of monitoring

1. Oral (survey report, interview)
2. Writing (verification tests, essays, summaries, diaries filling)
3. The practical implementation of manipulating the algorithm on a phantom.

Forms of run-time control – an exam.

Stages offsetting

Stage 1- process (Ticket).

Stage 2 - Demonstration of nursing intervention (manipulation of the phantom).

the criteria for its evaluation: the novelty of the text; validity of the choice of the source; the degree of disclosure of the issue; compliance to the design requirements.

The novelty of the text: a) the relevance of the research topic; b) the novelty and independence in the formulation of the problem, the formulation of a new aspect of a known issue in the establishment of new connections (interdisciplinary,

intrasubject, integration); c) the ability to work with the research, critical literature, to organize and structure the material; g) the phenomenon of the author's position, independence of estimates and judgments; d) the stylistic unity of text, the unity of genre features.

The extent of disclosure issues: a) compliance of the subject in the abstract with the plan; b) compliance of the content with subject and the abstract plan; c) the completeness and depth of knowledge on the subject; d) the validity of the methods and techniques of working with material; e) the ability to generalize, draw conclusions, compare different points of view on the same issue (problem).

Justification of the choice of sources: a) assessment of literature: were the most famous works on a research theme involved (including journal publications of recent years, the latest statistics, reports, certificates, etc.).

Compliance with the requirements for registration: a) are the references to the literature used, the list of references correct; b) assessment of literacy and culture presentation (including spelling, punctuation, stylistic culture), possession of terminology; c) compliance with the requirements to the volume of the abstract.

Mark «5» («A»): if all the requirements for writing and protection of the abstract are done: problem is identified, made a brief analysis of the various points of view on the matter under consideration and it is logical to set out its own position, formulated conclusions, the theme disclosed in full volume, sustained volume, met the requirements for external design, given the correct answers to additional questions.

Mark «4» («B»): - the basic requirements for the essay and its protection are met, but admitted shortcomings. In particular, there are inaccuracies in the presentation of the material; there is no logical sequence in the judgment; not drawn to the volume of the abstract; there are shortcomings in the design; answers to additional questions are given incompletely.

Mark «3» («C») - there are significant deviations from the requirements for abstracting Mark «3» («C»).

Mark «2» («D») - essay topic was not disclosed, a significant lack of understanding of the problem is revealed.

Mark «1» («E») - intern's essay is not represented.



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution of higher education
«Far Eastern Federal University»
(FEFU)

SCHOOL OF BIOMEDICINE

«AGREED»

«APPROVED»

Head of EP

Head of the Department of Fundamental and
Clinical Medicine

_____ Khotymchenko Y. S

_____ Geltzer B.I.

« ____ » _____ 2018 y.

« ____ » _____ 8y.

FUND ASSESSMENT TOOLS
Propaedeutics in Internal Medicine
Speciality 31.05.01 General Medicine
Full-time form of training

Vladivostok 2018

Passport of the Fund Assessment Tools is filled in accordance with the Regulations on the Funds of Evaluation Tools of Educational Programs of Higher Education - Bachelor's Programs, Specialties, FEFU Magistrates, approved by order of the Rector on 12/05/2015 No. 12-13-850.

Code and specification of the competence	Stages of competence generation	
Ability and willingness to implement ethical and deontological principles in professional activities (GPC 4)	ow Kn	Behavioral norms during inspection of the patient, ethics and deontology during an interview with the patient and his relatives
	able Be	To observe the rules of conduction when working with the team. To maintain confidentiality when meeting with medical background of the patient, the results of additional methods of examination
	ssess Po	Rules of etiquette to keep medical secrecy
PC – 5 - the readiness to collect and to analyze patient complaints, data of its history, the results of laboratory, instrumental, postmortem and other examinations to recognize the incidence or the absence of diseases	ow Kn	Anatomical, physiological, age and sexual characteristics of a healthy and sick person; the causes of the main pathological processes in the body and the mechanisms of their development; main symptoms and syndromes of internal disease.
	able Be	To make an inquiry of patient condition, patient's present complaints, history of the present disease (anamnesis morbi), past history (anamnesis vitae) To use palpation, percussioin and auscultation techniques for evaluation of heart and lung condition
	ssess Po	Methods of physical examination of the patient; Skills of interpretation of the received data, allocation of symptoms and syndromes of the disease
PC – 8 the ability to determining the tactics of patient surveillance with different nosological entities.	ow Kn	The main clinical symptoms and syndromes of diseases of internal organs and the mechanism of their occurrence; Symptomatology of the most common of internal diseases occurring in a typical classical form; diagnose the main clinical syndromes and justify this diagnosis
	able Be	to present the results of the examination of the patient in the case history
	ssess Po	skills in interpreting the results of general survey, palpation, percussion, auscultation and main instrument and laboratory diagnostic methods

. CONTROL OF COURSE GOALS' ACHIEVEMENT CONTROL OF ACHIEVEMENT OF COURSE GOALS

Code of competence		Stages of competence formation			
p/p	Controlled modules / sections / themes of academic discipline	Codes and stages of the formation of competencies	Evaluation tools - name		
			current control	intermediate evaluation	
1	Module I. Hospital surgery and its subject. Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery	willingness for medical use of drugs and other substances and their combinations in solving professional problems (GPC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
2	Module IV. General Syndromology in Surgery Module I. Hospital surgery and its subject.	the ability and willingness to conduct of preventive medical examinations, clinical examinations and dispensary observations. (PC-2)	Knows	EO-1 Interview	Questions of final control B semester - 39-110
			Is able to	EO-1 Interview	PW-1 Test
			Possesses	PW-1 Test PW-11 Case task	EO2 Colloquium
3	Module II. Basics of Vascular Pathology Module III. Basics of Endocrine Surgery Module IV. General Syndromology in Surgery	ability to determining the patient's basic pathological conditions, symptoms, syndromes, diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and Related Health X review (PC-6);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium
4	Module V. Surgical diseases of the chest and abdomen Module I. Hospital surgery and its subject. Module II. Basics of	ability to determine tactics of management of patients with different nosological forms (PC-8);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
			Is able to	PW-1 Test	PW-1 Test
			Possesses	EO-3 Report	EO2 Colloquium

	Vascular Pathology				
5	Module I. Hospital surgery and its subject.	Readiness for the management and treatment of patients with various nosological forms in outpatient and day hospital conditions (PC-9);	Knows	EO-1 Interview	Questions of final control 9 semester - 1-36
	Module II. Basics of Vascular Pathology		Is able to	PW-1 Test	PW-1 Test
	Module III. Basics of Endocrine Surgery Module IV. General Syndromology in Surgery Module V. Surgical diseases of the chest and abdomen		Possesses	EO-3 Report	EO2 Colloquium

The scale of assessment the level of formation of competences

Code and formulation of competence	Stages of the formation of competencies		Criteria	Indicators	Points
GPC-4 Ability and willingness to implement ethical and deontological principles in professional activities;	Knows (threshold level)	Behavioral norms during inspection of the patient, ethics and deontology during an interview with the patient and his relatives	Knowledge of ethics and deontology	Knows the norms of behavior is ready to conduct a conversation with the patient and his relatives	65-71
	Is able to (advanced)	To observe the rules of conduction when working with the team. To maintain confidentiality when meeting with medical background of the patient, the results of additional methods of examination	Skills of etiquette, adherence to medical secrecy	Able to comply with the basic rules of etiquette and medical secrecy	71-84
	Possesses (high)	Rules of etiquette to keep medical secrecy	Ability to comply with the rules of conduct and confidentiality	Ready and able to follow the rules of behavior when working with a team.	85-100
PC – 5 - the readiness to collect and to analyze patient complaints, data of its history, the results of laboratory, instrumental,	Knows (threshold level)	Anatomical, physiological, age and sexual characteristics of a healthy and sick person; the causes of the main pathological processes in the body	Knowledge of the history chart	Medical history	65-71

postmortem and other examinations to recognize the incidence or the absence of diseases		and the mechanisms of their development; main symptoms and syndromes of internal disease.			
	Is able to (advanced)	To make an inquiry of patient condition, patient's present complaints, history of the present disease (anamnesis morbi), past history (anamnesis vitae) To use palpation, percussioin and auscultation techniques for evaluation of heart and lung condition	Ability to conduct an examination of the patient.	Examination of the patient.	71-84
	Possesses (high)	Methods of physical examination of the patient; Skills of interpretation of the received data, allocation of symptoms and syndromes of the disease	The skill to synthesize and interpret the data obtained during the examination of the patient.	Interpretation of data obtained during the examination of the patient.	85-100
PC – 8 the ability to determining the tactics of patient surveillance with different nosological entities.	Knows (threshold level)	The main clinical symptoms and syndromes of diseases of internal organs and the mechanism of their occurrence; Symptomatology of the most common of internal diseases occurring in a typical classical form; diagnose the main clinical syndromes and justify this diagnosis	Knows the algorithm for managing patients with various nosological forms.	Medical history	65-71
	Is able to (advanced)	to present the results of the examination of the patient in the case history	Able to establish and justify the clinical diagnosis of the most common diseases of internal organs	Clinical diagnosis	71-84
	Possesses (high)	skills in interpreting the results of general survey, palpation, percussion, auscultation and main instrument and laboratory diagnostic methods	Skill in using modern diagnostic methods	Diagnosis of the disease	85-100

Questions for the exam

1. Propaedeutics of internal diseases. Content and characteristics of the discipline. Basic methods of patients examination: physical, instrumental, laboratory.
2. The basic sections of case history and rules of fulfillment. Basic structural parts of anamnesis (passport data, complaints of patient, review of systems, life history.
3. Method of leadthrough of general inspection of a patient. Determination of the general condition of a patient, estimation of the state of consciousness and position.
4. Body built and basic criteria of normal types of constitutions. Skin, its properties (color, elasticity, humidity, temperature, elements of rash, nevuses, scars) and pathological changes; an estimation of the state of hair and nails. Subcutaneous fat tissue (degree of development, distribution, types of obesity).
5. Lymphatic nodes examination. Characteristic of normal lymphatic nodes.
6. Complaints of patients with lung diseases.
7. Physiologic and pathologic forms of the chest, their criteria.
8. Method of leadthrough of static and dynamic inspection of a thorax.
9. Rate and depth of breathing: normal and pathological. Types of respiration. Rhythm of breathing. Normal and pathologic rhythms of breathing
10. Sequence of leadthrough of palpation of thorax, determination of the vocal fremitus, and semiologic estimation of results.
11. Percussion. Definition. Physical basics of percussion Types of percussion and their characteristic.
12. Percussion sounds and their characteristics. Technique of comparative percussion of lungs.
13. Technique of topographic percussion of the lungs. Diagnostic value of topographic percussion of the lungs.

14. Auscultation, definition of auscultation. Physical bases of auscultation. General rules for auscultation.
15. Vesicular breath sounds, characteristic. Changes of the vesicular breath sounds.
16. Bronchial breath sounds, characteristic. Pathological bronchial breath sounds.
17. Classification of adventitious sounds. Crackles, characteristic and mechanism of appearance.
18. Wheezes, characteristic and mechanism of appearance. 1 Rhonchi, characteristic and mechanism of appearance.
19. Pleural rub, characteristic and mechanism of appearance. Differential diagnostic of crackles, rhonchi and pleural rub.
20. Syndrome of focal consolidation of pulmonary tissue.
21. Syndrome of fluid in pleural cavity
22. Syndrome of air accumulation in pleural cavity.
23. Syndrome of cavity in the lung
24. Syndrome of an atelectasis (obturated and compression atelectasis).
25. The sputum analysis. Macroscopic examination of sputum. Microscopic examination of sputum.
26. Spirometry, static and dynamic lung volumes. Measurements of peak flow.
27. Pneumonia: causes, risk factors, clinical features, laboratory and instrumental testing by stages of the disease.
28. Pleurisy: causes, clinical features: complaints, physical examination, laboratory and instrumental testing.
29. Bronchial asthma: risk factors, classification, clinical features, physical examination, laboratory and instrumental testing.
30. Emphysema of lungs: causes, risk factors, classification, clinical features, physical examination, laboratory and instrumental testing.

31. Chronic obstructive pulmonary disease: risk factors, classification, clinical features, physical examination, laboratory and instrumental testing.
32. Main complaints of patients with diseases of cardiovascular system and their pathogenesis.
33. General inspection of patients with diseases of cardiovascular system.
34. Inspection and palpation of the apical impulse. Pathological impulses or pulsation and their characteristic.
35. Methods of percussion of the heart. Changes of the borders of the heart in different cardiac diseases.
36. General rules for heart auscultation.
37. Mechanism of formation of the first and second heart sounds
38. Changes of the heart sound loudness.
39. The mechanism of origin of organic valvular murmurs. Classification of murmurs. The mechanism of origin of organic murmurs.
40. Functional murmurs. The mechanism of origin of the functional murmurs. The difference between organic and functional murmurs.
41. Rules and sequence of research of pulse on a radial artery. Determination of basic properties of pulse.
42. Electrocardiographic method of research of cardiac functions. Method of ECG registration and decoding. Clinical and diagnostic value of method of electrocardiography.
43. ECG features of right ventricular hypertrophy. ECG features of left ventricular hypertrophy.
44. Rheumatic fever: causes and pathogenesis, clinical features, laboratory and instrumental testing.
45. Mitral Stenosis: definition, causes, changes of hemodynamics due to mitral stenosis, complaints, physical examination, laboratory and instrumental testing.
46. Mitral regurgitation: definition, causes, changes of hemodynamics due to mitral regurgitation, complaints, physical examination, laboratory and instrumental

testing. 47. Infective endocarditis: definition, causes, risk factors, classification, complaints, physical examination, laboratory and instrumental testing, complications.

48. Aortic stenosis: definition, causes, changes of hemodynamics due to aortic stenosis, complaints, physical examination, laboratory and instrumental testing.

49. Aortic regurgitation: definition, causes, changes of hemodynamics due to aortic regurgitation, complaints, physical examination, laboratory and instrumental testing. 50. Arterial hypertension: classification of arterial hypertension, clinical features laboratory and instrumental testing.

51. Arterial Hypertension, Complications. Hypertensive crisis: definition, complaints, physical examination, first aid.

52. Secondary hypertension, classification, clinical features.

53. Ischemic heart disease, risk factors of ischemic heart disease. Classification of ischemic heart disease

54. Stenocardia: clinical features (complaints, physical examination). Grading of stable stenocardia.

55. Stenocardia: laboratory and instrumental testing (ECG, stress testing (exercise **and pharmacologic**), **echocardiography, radionuclide imaging, coronary arteriography**).

56. Myocardial infarction: classification, complaints, physical examination. Myocardial infarction: ECG features, laboratory testing.

57. Heart failure: definition, classification. Heart failure: causes. Systolic dysfunction and diastolic dysfunction: definition, mechanism of appearance.

58. Acute left-sided heart failure (pulmonary edema): Causes, Complaints, Physical examination. Acute right-sided heart failure: Causes, Complaints, Physical examination.

59. Chronic heart failure: Classification, Complaints, Physical examination, investigations.

60. Complaints of patients with diseases of esophagus and stomach.
61. Complaints of patients with diseases of intestine.
62. Syndrom of dyspepsia.
63. Light (superficial) palpation of the abdomen.
64. Deep palpation of the intestine and stomach.
65. Acute gastritis: causes, clinical features (complaints, physical examination, laboratory and instrumental testing).
66. Chronic gastritis: classification of chronic gastritis, clinical features , laboratory and instrumental testing).
- 67 Gastric ulcer and duodenal ulcer: clinical features: complaints, physical examination, laboratory and instrumental testing.
68. Complications of gastric and duodenal ulcer.
69. Instrumental testing of intestine (colonoscopy, anoscopy and rigid and flexible sigmoidoscopy, radiological investigations) and pancreas (ultrasound study and CT scanning).
70. Feces analysis.
71. Chronic pancreatitis: causes, clinical features: complaints, physical examination, laboratory and instrumental testing.
72. The main complaints of patients with diseases of liver and biliary tract.
73. General inspection of patients with liver diseases.
74. Percussion of the liver. Determination of the superior and inferior borders of absolute liver dullness.
75. Bilirubin metabolism, classification and diagnostic of different types of jaundice.
76. The main syndrome in liver and gallbladder diseases: portal hypertension, hepatosplenomegaly, syndrome of hepatocytes cytolysis, hepatocellular failure, mesenchymal inflammation of liver, hepatorenal syndrome, hemorrhagic syndrome and edemas.

77. Chronic hepatitis, classification of chronic hepatitis. Clinical features of chronic hepatitis, laboratory and instrumental testing.

78. Causes and pathogenesis of liver cirrhosis, classification of liver cirrhosis
Clinical features and diagnostics of liver cirrhosis.
79. Causes and pathogenesis of chronic cholecystitis and gallstone disease. Clinical features of chronic cholecystitis: complaints, physical examination, laboratory and instrumental testing).
80. Complaints of patients with diseases of renal system.
81. General inspection of patients with diseases of renal system. Palpation of kidney and urinary bladder. Detection of Pasternatskij sign.
82. Urine analysis: assessment of physical properties (color, appearance, smell, quantity, specific gravity), chemical examination (pH, glucose, ketones, protein, bilirubine, urobilinogen).
83. Urine analysis: microscopical examination (RBC number, WBC number, casts, crystals, bacteria, parasites, epithelial cells). 84. The Zimnitsky functional test. The Nechiporenko urine analysis. Blood test and biochemical blood test, changes of them due to kidney diseases.
84. Main syndromes in diseases of renal system.
85. Acute and chronic pyelonephritis, causes, clinical features (complaints, physical examination, laboratory and instrumental testing).
- 86 Nephrotic syndrome: causes, clinical features (complaints, physical examination, laboratory and instrumental testing)
87. Causes and pathogenesis of acute glomerulonephritis. Acute glomerulonephritis: clinical features (complaints, physical examination, laboratory and instrumental testing). 88. Chronic glomerulonephritis: classification of chronic glomerulonephritis, clinical features (complaints, physical examination, laboratory and instrumental testing).
89. Acute renal failure: causes, clinical features (complaints, physical examination, laboratory and instrumental testing).

90. Classification of chronic renal failure (chronic renal disease). Causes, clinical features (complaints, physical examination, laboratory and instrumental testing) in patients with initial stages of chronic renal failure (chronic renal disease).
91. Main complaints of patients with diseases of blood.
92. Physical examination of patients with diseases of blood (general inspection, palpation of lymphatic glands, palpation of spleen and liver).
93. Classification of anemia. Iron deficiency anemia: causes, clinical features (complaints, physical examination, laboratory and instrumental testing).
94. Megaloblastic anemia (B12 deficiency anemia): causes, clinical features (complaints, physical examination, laboratory and instrumental testing).
95. Signs and symptoms of acute leukemia (lymphoid and myeloid): clinical features (complaints, physical examination, blood test).
96. Signs and symptoms of chronic leukemia (lymphoid and myeloid): clinical features (complaints, physical examination, blood test).
97. Examination of patients with endocrine diseases: main complaints, data of physical investigation.
98. Diabetes mellitus: classification, causes, risk factors. Clinical features of diabetes mellitus type I and type II (complaints, physical examination, laboratory testing).
99. Palpation of thyroid gland. Degrees of thyroid gland enlargement. Complaints of patients with diffusive toxic goiter. 10. Physical examination of patients with hyperthyroidism. Eye symptoms. Laboratory and instrumental testing.
100. Etiology and pathogenesis of hypothyroidism. Complaints of patients with hypothyroidism. Physical examination of patients with hypothyroidism. Laboratory and instrumental testing.
101. Definition of allergy. Causes of allergy. Urticaria: clinical features (complaints, physical examination, laboratory and instrumental testing).

102. Quincke's edema: clinical features (complaints, physical examination, laboratory and instrumental testing).

103. Anaphylactic shock: clinical features (complaints, physical examination, laboratory and instrumental testing). First aid in anaphylactic shock.

Test example.

1. Choose the symptom of disease:
 - a. High blood pressure
 - b. High cholesterol
 - c. Weakness
 - d. Anemia
2. Choose the sign of disease:
 - a. Jaundice (icterus)
 - b. Pain
 - c. Insomnia
 - d. Headache
3. Which is definition means acute disease:
 - a. Disease that persists over a long period
 - b. Unexpected difficulties arising in the progression of a disease
 - c. The return of signs and symptoms of a disease after the patient has enjoyed a remission
 - d. Disease or disorder that lasts a short time, comes on rapidly, and is accompanied by distinct symptoms.
4. Which is definition means chronic disease:
 - a. Disease that persists over a long period
 - b. Unexpected difficulties arising in the progression of a disease
 - c. The return of signs and symptoms of a disease after the patient has enjoyed a remission
 - d. Disease or disorder that lasts a short time, comes on rapidly, and is accompanied by distinct symptoms.
5. Which is definition means relapse of disease:
 - a. Disease that persists over a long period
 - b. Unexpected difficulties arising in the progression of a disease
 - c. The return of signs and symptoms of a disease after the patient has enjoyed a remission
 - d. Disease or disorder that lasts a short time, comes on rapidly, and is accompanied by distinct symptoms
6. Which is definition means complication of the disease:
 - a. Disease that persists over a long period
 - b. Unexpected difficulties arising in the progression of a disease
 - c. The return of signs and symptoms of a disease after the patient has enjoyed a remission
 - d. Disease or disorder that lasts a short time, comes on rapidly, and is accompanied by distinct symptoms
7. Helicobacter pillory is Helicobacter pillory is
 - a. Chemical cause of disease

- b. Genetic cause of disease
- c. Biological cause of disease
- d. Physical cause of disease

8. Frostbite is:

- a. Chemical cause of disease
- b. Genetic cause of disease
- c. Biological cause of disease
- d. Physical cause of disease

9. Choose the genetic disease:

- a. Pneumonia
- b. Phenylketonuria
- c. Ulcer
- d. Tuberculosis

10. International Statistical Classification of Diseases and Related Health Problems (ICD-10) is used in

- a. Russian Federation
- b. Europe
- c. All world
- d. Far East

11. Breaking confidentiality cases:

- a. Request relatives
- b. Request from patient's job
- c. If required by law

12. What is the frequency of urine is collected for her research on Zimnitsky:

- a. 12 hours
- b. 6 hours
- c. After 4 hours
- d. 3 hours

13. The patient, aged 59, was admitted to the emergency room unconscious. Mouth smell of ammonia. Seen from the oral mucosa found whitish coating. Pathology of any organ system can be suspected?

- a. Respiratory
- b. Cardiovascular
- c. Urinary
- d. Gastrointestinal

14. Typical site of duodenal ulcer pain:

- a. umbilical region
- b. right hypochondriac region

- c. left hypochondriac region
 - d. left iliac region
15. Typical site of appendicitis pain:
- a. umbilical region
 - b. right hypochondriac region
 - c. left hypochondriac region
 - d. right iliac region
16. Typical site of Gastro-oesophageal reflux disease pain:
- a. umbilical region
 - b. epigastric region
 - c. left hypochondriac region
 - d. left iliac region
17. Solid food passes more readily than liquid in:
- a. functional dysphagia
 - b. Organic dysphagia
18. Increased appetite reasons:
- a. Infections
 - b. thyrotoxicosis
 - c. Cancer
 - d. Some medications (chemotherapy)
19. Causes of stomach and duodenum hemorrhage:
- a. Typhoid fever
 - b. Dysentery
 - c. Peptic ulcer
 - d. Injury to the esophagus by a foreign body
20. Constipation (obstipation) is evacuation of intestine of:
- a. 5 and less times a week
 - b. 3 and less times a week
 - c. more than 5 times a week
 - d. each day
21. Significant: > 5% of body loss weight is the sign of:
- a. gastritis
 - b. GERB
 - c. hepatitis
 - d. stomach cancer
22. Exacerbating factors of stomach ulcer:
- a. non-steroidal anti-inflammatory drugs
 - b. coffee
 - c. physical exercises
 - d. hot food
23. Worsening of pain in hunger is characteristic of:
- a. GERB

- b. Peptic ulcer
 - c. Duodenal ulcer
 - d. Pancreatitis
24. Upper GI endoscopy (EGD) enables the examination:
- a. colon
 - b. the esophagus, stomach and the duodenum
 - c. left colon to the splenic flexure
 - d. Jejunum
25. Geographical” with inflamed field (hunter glossitis) is a sign:
- a. gastritis
 - b. pancreatitis
 - c. vitamin –B12 –deficient anemia
 - d. vitamin D -deficient
26. Goal of light (superficial) palpation:
- a. to assess location of sigmoid intestine
 - b. to estimate pancreas
 - c. to determine the border of liver
 - d. To determine the presence of tenderness and strain of muscles of abdominal
27. Causes of tenderness of the abdominal wall:
- a. Perforation of the ulcer of stomach
 - b. gastritis
 - c. pancreatitis
 - d. stomach cancer
28. Causes of localized abdominal distension:
- a. hepatomegaly
 - b. obesity
 - c. ascites
 - d. pregnancy
29. Causes of generalized abdominal distension:
- a. hepatomegaly
 - b. splenomegaly
 - c. peritonitis
 - d. hernia
30. General rules of light palpation of the abdominal:
- a. Palpation should be begun with the epigastric region
 - b. Palpation should be begun with right hypochondriac region
 - c. Palpation should be begun with the painless not affected with pathological process area
 - d. Palpation should be begun with the left iliac region
31. Erosion is:

- a. a limited defect in the wall of the stomach that seizes the mucous membrane and some other layers
- b. a small superficial defect in the mucous membrane of white or yellow with even margins
- c. hyperemia of stomach mucous membrane
- d. the ulcer is of rounded shape, the edges are high, clearly outlined, the slopes of the ulcer crater are cut off

32. Occult blood is a quick test which can be done to test for:

- a. diagnosis of pancreas disorders
- b. microscopic traces of blood in the stool
- c. the presence of worm larvae or eggs
- d. the presence of Helicobacter pylori

33. Black color of stool is the sign of:

- a. blood of upper GIT origin.
- b. yeast fermentation (Candida)
- c. biliary obstruction or barium (swallow or enema)
- d. normal stool

34. Causes of elevated levels of blood ALT & AST:

- a. gastritis
- b. pancreatitis
- c. GERB
- d. viral hepatitis

35. Alpha-fetoprotein (AFP) level used to screen and diagnose:

- a. Hepatocellular carcinoma & hepatoblastoma
- b. Helicobacter pylori associated gastritis
- c. Stomach ulcer
- d. Hepatitis

36. Acute pain with sudden onset in the right hypochondriac region are provoked by jolting or by fatty food is typical for:

- a. gastritis
- b. hepatitis
- c. gall bladder stones
- d. liver cancer

37. Persistent boring pain in the right hypochondriac region is typical for:

- a. stomach ulcer
- b. hepatitis
- c. gall bladder stones

d. liver cancer

38. Post hepatic jaundice signs:

a. high level of direct bilirubin, duck yellow color of urine and stool

b. high level of conjugated (indirect) bilirubin, duck yellow color of urine and pale stool

c. high level of conjugated (indirect) and unconjugated (direct) bilirubin, duck yellow color of urine and pale stool

39. Pre hepatic jaundice signs:

a. high level of direct bilirubin, duck yellow color of urine and stool

b. high level of conjugated (indirect) bilirubin, duck yellow color of urine and pale stool

c. high level of conjugated (indirect) and unconjugated (direct) bilirubin, duck yellow color of urine and pale stool

40. Hepatic jaundice signs:

a. high level of direct bilirubin, duck yellow color of urine and stool

b. high level of conjugated (indirect) bilirubin, duck yellow color of urine and pale stool

c. high level of conjugated (indirect) and unconjugated (direct) bilirubin, duck yellow color of urine and pale stool

41. Transient slight to moderate increase of ALT and AST are the signs of:

a. viral hepatitis

b. Cirrhosis

c. alcoholic intake

42. Diffuse abdominal pain is the symptom of:

a. Pancreatitis

b. Peptic ulcer

c. Gastric cancer

d. Peritonitis

43. Sudden onset pain is the feature of:

a. appendicitis

b. large bowel obstruction.

- c. stomach cancer
 - d. chronic inflammatory processes
44. Loss and drop of appetite reasons:
- a. functional dyspepsia
 - b. Infections
 - c. diabetes mellitus
 - d. thyrotoxicosis
45. When dysphagia develops immediately:
- a. esophagus cancer
 - b. cicatricial stenosis of the esophagus
 - c. in the presence of a foreign body
 - d. mediastinal cancer
46. Relieving factors for peptic ulcer:
- a. alcohol
 - b. non-steroidal anti-inflammatory drugs
 - c. food
 - d. antibiotics
47. Radiation of pain at ulcer disease:
- a. to the shoulder
 - b. to the scapula
 - c. to the groin
 - d. to the back
- 48 . A form of indigestion felt as a burning sensation in the chest is called:
- a. dysphagia
 - b. belching
 - c. heartburn
 - d. nausea

