

No. ЛД-21ИИ

**Annotation of the work program of the discipline " MODERN METHODS OF
EXAMINATION OF PATIENTS"**

The main professional educational program of higher education - specialty programs in the specialty 31.05.01 General medicine, approved 25.12.2020

Full-time form of education

Term of mastering the OBOP VO: 6 years

Department: Internal Medicine No. 1

1 the purpose of the discipline: the formation of important professional skills in patient examination, the foundations of clinical thinking, as well as medical ethics and deontology.

2. Place of discipline in the structure of OOP: The discipline "Propedeutics of Internal Diseases" refers to the basic part of block 1 of the Federal State Educational Standard of Higher Education in the specialty 31.05.01 "General Medicine"

3. Requirements for the results of mastering the discipline:

The process of studying the discipline is aimed at the formation and development of competencies: OPK-1 OPK-4 OPK-5 PC-1 PC-2. As a result of studying the discipline, the student must

*Know by **Normal Anatomy:***

- methods of anatomical research and anatomical terms (Russian and Latin);
- anatomy and topography of organs, systems and apparatus of organs, details of their structure and basic functions;
- the relationship of organs with each other; organ projections on the body surface;
- the main stages of organ development (organogenesis);
- the main options for the structure and possible malformations of organs;
- patterns of the structure of the human body as a whole, anatomical and functional relationships of individual parts of the body with each other;
- the importance of fundamental research in anatomical science for practical and theoretical medicine.

Be able to:

- use anatomical instruments correctly (tweezers, scalpel);
- own anatomical terminology (in Russian and Latin);
- to find parts of organs, separate formations on anatomical preparations;
- find organs and the main details of their structure on radiographs;
- find and determine the location and projection of organs, large vessels, bone formations on the surface of the body.

Normal physiology:

Know:

- the main stages in the development of physiology and the role of domestic scientists in its creation and development;
- the regularities of the functioning of cells, tissues, organs, systems of a healthy organism and the mechanisms of its regulation, considered from the standpoint of general physiology, particular physiology and integrative behavioral activity of a person;
- the essence of methods for studying various functions of a healthy organism, which are widely used in practical medicine.

Be able to:

- explain the principles of the most important methods for studying the functions of a healthy organism;
- to explain the information value of various indicators (constants) and mechanisms of regulation of the activity of cells, tissues, organs, systems and the whole organism;
- to evaluate and explain the basic laws of the formation and regulation of the physiological functions of the body when an adaptive result is achieved;

- to evaluate and explain the general principles of construction, activity and significance of the leading functional systems of the body;
- to evaluate and explain the patterns of formation and regulation of the basic forms of the organism's behavior, depending on the conditions of its existence.

Biochemistry

Know:

- the basics of the structural organization and functioning of the main biomacromolecules of the cell, subcellular organelles; fundamentals of mechanisms of intermolecular interaction;
- the most important functional properties and the main metabolic pathways of proteins, nucleic acids, carbohydrates, lipids; the biological value of vitamins;
- mechanisms of enzymatic catalysis; features of the enzymatic composition of organs; basic principles of diagnostics and treatment of diseases associated with dysfunction of enzymes;
- the basics of bioenergy. Molecular biooxidation. The main metabolic pathways for the formation of substrates for the mitochondrial and extramitochondrial systems of oxygenation;
- the main molecular mechanisms of regulation of the metabolism of carbohydrates, lipids, proteins, amino acids, nucleotides. How hormones work;
- features of the metabolism of the liver, kidneys, blood, extracellular matrix, connective, nervous and muscle tissues;
- principles of biochemical analysis, diagnostically significant indicators of the composition of blood, urine and gastric juice in a healthy person.

Be able to:

- explain the molecular mechanisms of maintaining homeostasis under various influences of internal and external factors;
- to explain the molecular mechanisms of metabolic disorders that occur in some hereditary and acquired diseases, using knowledge about the main pathways for the conversion of proteins, nucleic acids, carbohydrates and lipids in the human body;
- explain the molecular mechanisms of the functioning of various cells, organs and tissues, taking into account the peculiarities of their qualitative and quantitative composition, as well as the characteristics of metabolism that take place in these structures;
- explain the methods of neutralizing toxic substances in the body, applying knowledge of the mechanisms of detoxification of endogenous substances and foreign compounds;
- explain the therapeutic effect of certain drugs using knowledge of the molecular processes and structures that are the target of these drugs;
- to analyze possible ways of introducing drugs into the body, using knowledge about the processes of digestion and absorption, about the biotransformation of drugs in the body;
- to evaluate data on the chemical composition of biological fluids to characterize the rate and signs of disease;
- to interpret the results of biochemical studies taking into account the age characteristics of the organism.

Pharmacology:

Know:

- principles for the discovery of new drugs,
- general principles of pharmacokinetics and pharmacodynamics of drugs,
- classification and characteristics of the main groups of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of drugs; types of dosage forms, doses of individual drugs; incompatibility of drugs,
- the main adverse reactions of the most common drugs, methods of prevention and correction;
- general principles for the preparation of prescriptions and the preparation of prescription prescriptions for medicines, generally accepted abbreviations and designations in prescriptions, the use of the Latin language, rules for the storage and use of medicines;
- sources of information: State Pharmacopoeia, Register of Medicines of Russia, State Register of Medicines, Encyclopedia of Medicines, etc.

Be able to:

- distinguish between the concepts of "dosage form", "drug substance", "drug", "drug", "medicinal raw material", "biologically active food additive" (BAA), "homeopathic remedy";
- to analyze the action of medicinal products in terms of the totality of their pharmacological properties;
- to evaluate the possibilities of using drugs for pharmacotherapy;
- write prescriptions for medicines;
- to assess the possibility of the toxic effect of drugs and methods of therapy for drug poisoning;
- conduct a search on pharmacology issues using information sources - reference books, databases, Internet resources.

Pathological anatomy:

Know:

- pathology of the cell and general pathological processes, the totality of which determines the morphological manifestations of a particular disease;
- etiology, pathogenesis and morphology of diseases at different stages of their development (morphogenesis), structural bases of recovery, complications, outcomes and long-term consequences of diseases;
- morphology and mechanisms of the processes of adaptation and compensation of the organism in response to the influence of pathogenic factors and changing environmental conditions;
 - changes in diseases arising both in connection with changing environmental conditions and treatment (pathomorphosis), and as a result of therapeutic, surgical and diagnostic manipulations (pathology of therapy).

Be able to :

Participate in the examination of the corpse during the pathoanatomical autopsy and determine the signs of death and postmortem changes

-to give a macroscopic characterization of the organs and tissues of the body

Pathological physiology

To know:

-basic concepts and categories of general nosology

-the role of the causes, conditions of reactivity and resistance of the organism in the mechanisms of occurrence, development and completion of the outcome of diseases

-causes and mechanisms of development of typical pathological processes

-features of etiology, pathogenesis of pathological processes in

-the value of experimental types of modeling

Be able to:

-apply the acquired knowledge in the study of clinical disciplines

-analyze issues of general and private pathophysiology

-plan experiments on animals

-correctly understand the significance of the experiment for the study of clinical forms of pathology

-The total labor intensity of the discipline is 10 credits (360 hours)

-5. Semester 4,5,6

-6. The main sections of the discipline:

1. General propaedeutics issues

2. Private issues of propaedeutics

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