

No. LD-16 ИИ

Annotation of the educational practice program "Clinical practice (patient care of a therapeutic and surgical profile)"

The main professional educational program of higher education - specialist's programs in the specialty 31.05.01 General Medicine, approved on 30.03.2022

Full-time form of education

Term of development of OPOP VO: 6 years

Department: Internal Diseases №1, Surgical Diseases №1

1. Purpose of practice:the formation of important professional skills for examining a patient, the basics of clinical thinking, as well as medical ethics and deontology.

2. The place of practice in the structure of the OOP: educational practice "Clinical practice (patient care of a therapeutic and surgical profile)" refers to block 2 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 practice:

The process of studying practice is aimed at the formation and development of competencies:OK-7, OPK-4, OPK-6, OPK-7, OPK-10, PK-1, PK-2, PK-7, PK-8, PK-10, PK-11

As a result of studying practice, the student must

Know:Chemistry

- thermodynamic and kinetic patterns that determine the course of chemical and biochemical processes;
- physical and chemical aspects of the most important biochemical processes and various types of homeostasis in the body: theoretical foundations of bioenergetics, factors affecting the shift in the balance of biochemical processes;
- methods of expressing the concentration of substances in solutions, methods of preparing solutions of a given concentration;
- mechanisms of action of buffer systems of the body, their relationship and role in maintaining acid-base homeostasis; features of acid-base properties of amino acids and proteins;
- patterns of physical and chemical processes in living systems from the point of view of their competition arising from the combination of different types of equilibria;
- the role of colloidal surfactants in the absorption and transfer of low-polarity substances in a living organism;
- structure and chemical properties of the main classes of biologically important biological compounds;
- the role of biogenic elements and their compounds in living systems;
- physical and chemical foundations of surface phenomena and factors influencing the free surface energy;
- features of adsorption at different phase boundaries;
- physical and chemical methods of analysis in medicine (titrimetric, electrochemical, chromatographic, viscometric).

Be able to:

- use physical and chemical equipment;
- work with magnifying equipment (microscopes, optical and simple magnifiers);
- classify chemical compounds based on their structural formulas;
- predict the results of physical and chemical processes occurring in living systems, based on theoretical provisions;
- scientifically substantiate the observed phenomena;

- make physical and chemical measurements that characterize certain properties of solutions, mixtures and other objects that simulate the internal environment of the body;
- to observe the course of chemical reactions and draw reasonable conclusions;

Biology

Know:

- general patterns of origin and development of life, properties of biological systems, anthropogenesis and human ontogenesis; know the basic laws of the evolutionary transformation of human organs and systems of organs;
- the laws of genetics and its significance for medicine; modern methods of studying human genetics; principles of medical genetic counseling; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases;
- biosphere and ecology, basic properties of ecosystems, ecological laws and rules, features of anthropobio-ecosystems, the impact of biotic, abiotic and social factors on the human body, human adaptation to the environment, the phenomenon of parasitism and bioecological diseases;

Be able to:

- use laboratory equipment, work with a microscope;
- determine the mitotic activity of tissues;
- explain the nature of deviations in the course of development, leading to the formation of variants, anomalies and vices;
- identify human parasites on micro- and macropreparations

Physics

Know:

- Ecological and ethical aspects of the effects of physical factors on humans
- Fundamentals of the use of physical factors for diagnosis and treatment: ultrasound, sound, electromagnetic waves, radionuclides, ionizing radiation.
- Physical parameters characterizing the functional state of organs and tissues: mechanical, electrical, electromagnetic, optical.
- Physical phenomena and processes underlying the vital activity of the organism and their characteristics.
- Safety rules for working with physical devices

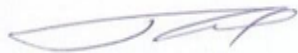
Be able to:

- Measure physical parameters and evaluate the physical properties of biological objects using mechanical, electrical and optical methods.

4. Generali labor intensity of practice is 4 credits (144 hours)

- **5. Semester:** one
- **6. Main sections of practice:**

- 1. General issues of patient care of the therapeutic and surgical profile.
- 2. Particular issues of care for therapeutic and surgical patients with pathology of various systems and organs.
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- Author:
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A handwritten signature in blue ink, appearing to be 'I.N. Totrov', is written on a light blue rectangular background.