No. LD-21

Annotation of the work program of the discipline "Fundamentals of patient care"

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 OBOP VO: Discipline "Fundamentals of patient care" refers to the variable 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-5, OPK-6, PC-1, PC-2

As a result of studying the discipline, the student must *Know:* **Chemistry**

- thermodynamic and kinetic laws that determine the flow chemical and biochemical processes;

- physicochemical aspects of the most important biochemical processes and varioustypes of homeostasis in the body: theoretical foundations of bioenergetics, factors affecting the displacement of the balance of biochemical processes;

- ways of expressing the concentration of substances in solutions, methods of preparation solutions of a given concentration;

- mechanisms of action of the body's buffer systems, their relationship and role in maintaining acid-base homeostasis; features of the acid-base properties of amino acids and proteins;

- regularities of the course of physical and chemical processes in living systems with the point of view of their competition arising from the combination of different types of equilibria;

- the role of colloidal surfactants in assimilation and transferlow-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 affecting free surface energy;

- features of adsorption at various phase boundaries;
- physical and chemicalmethods of analysis in medicine (titrimetric,

electrochemical, chromatographic, viscometric).

Be able to:

- use physical and chemical equipment;
- work with magnifying equipment (microscopes, optical and simplemagnifiers);
- classify chemical compounds based on their structuralformulas;
- to predict the results of physical and chemical processes occurring inliving systems, based on theoretical provisions;

- scientifically substantiate the observed phenomena;
- make physicochemical measurements that characterize certainproperties of solutions, mixtures and other objects that simulate the internal environment of the body;
- monitor the progress of chemical reactions and doreasoned conclusions;

Biology

Know:

- general laws of the origin and development of life, properties of biological systems, human anthropogenesis and ontogenesis; know the basic laws of the evolutionary transformation of organs and systems of human organs;

- laws of genetics and its importance 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, peculiarities of anthropobioecosystems, influence on the human body of biotic, abiotic and social factors, human adaptation to the environment, the phenomenon of parasitism and bioecological diseases;

Be able to:

- use laboratory equipment, work with a microscope;

- to determine the mitotic activity of tissues;

- explain the nature of deviations in the course of development leading to the formation variants, anomalies and defects;

- to identify human parasites on micro- and macro-preparations

Physics

Know:

- Environmental and ethical aspects of the effects of physical factors onhuman

- Fundamentals of the application of physical factors for diagnosis and treatment:ultrasound, sound, electromagnetic waves, radionuclides, ionizing radiation.

- Physical parameters characterizing the functional state of organsand fabrics: mechanical, electrical, electromagnetic, optical.

- Physical phenomena and processes underlying lifeorganism and their characteristics.

- Safety regulations when working with physical devices

 Измерять физические параметры и оценивать физические свойства – биологических объектов с помощью механических, электрических и оптических методов.

- 4. Общая трудоемкость дисциплины составляет 2 зачетные единицы (72 часа)
- 5. Семестр: 1
- 6. Основные разделы дисциплины:
- 1. Общие вопросы ухода за больными терапевтического профиля.
- 2. Частные вопросы ухода за больными терапевтического профиля с патологией различных систем и органов.
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- Автор:
- Тотров И.Н., д.м.н., зав. внутренних болезней № 1

