ЛД 16ИН
Annotation of the work program of the discipline "Medical Informatics"
(medical Faculty)

1. The purpose of the discipline: the student's mastery of the theoretical foundations of medical informatics and the practice of applying modern information and telecommunication technologies in medicine and health care.

2. Place of discipline in the structure of the PLO: the medical computer science discipline belongs to Block 1 the main professional educational program of higher education - specialty program in the specialty 31.05.01 General Medicine, approved, May , 24, 2023

3. Requirements for the results of mastering the discipline:
The process of studying the discipline is aimed at the formation and development of competencies:
GPC-1, PC -18.

As a result of studying the discipline, the student must
know:
- theoretical foundations of computer science;
- collection, storage, search, processing, transformation, dissemination of information in medical and biological systems;
- use of information computer systems in medicine and health care;
- mathematical methods for solving intellectual problems and their application in medicine;

be able to:
- use educational, scientific, popular science literature;
- the Internet for professional activities;
- to make calculations according to the results of the experiment;
- conduct elementary statistical processing of experimental data;

own:
- basic information transformation technologies using word processors, spreadsheets, relational database management systems;
- basic methods of statistical processing of clinical and experimental data using standard applied and special software;
- basic skills of using medical information systems and Internet resources for the implementation of professional tasks.
-

4. The total complexity of the discipline is 3 credit units (108 hours)
5. Semester: 1
6. The main sections of the discipline:
1. The concept of information.
General characteristics of the processes of collecting, transmitting, processing and accumulating information. Methods and means of information in medicine and health care.
2. Telecommunication technologies and Internet resources in medicine.

3. Basic information transformation technologies.
4. Modeling of physiological, morphological, molecular genetic and biochemical processes.
5. Information systems of medical institutions.
6. Informational support of the diagnostic and treatment process.
7. Medical and technological systems of control and management of body functions.
8. Automated medical technology systems, clinical and laboratory research and functional diagnostics.
9. Information systems in health management of the territorial and federal levels.

Author:
Babenko AV, Associate Professor, Department of Chemistry and Physics

Head of Department   Kalagova RV