Abstract of the working program of the discipline "Medical Informatics"
(medical case)

1. The purpose of the discipline: mastering the student theoretical foundations of medical informatics and the practice of applying modern information and telecommunication technologies in medicine and public health.
2. The place of discipline in the structure of the PLO: the academic discipline Medical Informatics refers to the Block 1 of the Federal State Educational Standard of Higher Education in the specialty of Medicine.
3. Requirements for the results of the discipline:
The process of studying the discipline is aimed at the formation and development of competences:
GPC-
1, PC-18.
As a result of studying the discipline, the student must

know:

- *theoretical bases of computer science;*
- *collection, storage, retrieval, processing, transformation, dissemination of information in medical and biological systems;*
- *use of information computer systems in medicine and public health;*
- *mathematical methods for solving intellectual problems and their application in medicine;*

be able to:

- *use educational, scientific, popular science literature;*
- *Internet for professional activities;*
- *perform calculations based on the results of the experiment;*
- *conduct an elementary statistical processing of the 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 application and special software;*
- *basic skills of using medical information systems and Internet resources to implement 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 data collection, transmission, processing and accumulation. Methods and means of informatization in medicine and public health.
2. Telecommunication technologies and Internet resources in medicine.

3. Basic information conversion technologies.

4. Modeling of physiological, morphological, molecular-genetic and biochemical processes.

5. Information systems of medical and preventive institutions.

6. Informational support of the medical-diagnostic process.

7. Medical and technological systems for monitoring and controlling body functions.

8. Automated medical and technological systems of clinical and laboratory research and functional diagnostics.

9. Information systems in the health management of territorial and federal levels.

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