

ABSTRACT

OF THE ACADEMIC DISCIPLINE

"EUROPEAN COMPUTER LITERACY STANDARD"

GENERAL CHARACTERISTICS OF THE DISCIPLINE

The discipline «Standard of Computer Literacy» introduces students to the regularities and principles of information processes in systems of different levels of the hierarchy of the healthcare industry, problems of collection, preservation, processing and transmission of signals and images in pediatrics, decision support systems in pediatrics; information technologies of analysis, modeling, forecasting, management in the field of medical and biological research, theory of medical information systems.

THE PURPOSE AND OBJECTIVES OF THE DISCIPLINE

The purpose of teaching the discipline "European standard of computer literacy": formation and development of competence in the field of digital technologies for future doctors to ensure the rational use of modern software for general and special purpose in the processing of medical and biological data, the study of patterns and principles of information processes in systems of different levels of hierarchy in the field of health, problems of collection, preservation, processing and per signals and images in medicine, decision support systems in medicine; information technologies of analysis, modeling, forecasting, management in the field of medical and biological research, theory of medical information systems.

The main tasks of studying the discipline "European standard of computer literacy" are:

- formation and development of knowledge, abilities and skills necessary for the effective use of system and applied software in the field of health care;
- familiarization with the possibilities of new information and communication technologies in the field of healthcare, the basics of telemedicine and prospects for the development of digital technologies in the future;
- development of skills to independently master the software of medical and general purpose, update previously acquired knowledge and apply them in pediatric activities;
- mastering by computer technologies of visualization and statistical analysis of data of medical and biological researches;
- assimilation of the concept of databases, familiarization with specialized databases of evidence-based medicine, especially in the field of pediatrics;
- explanation of the principles of formalization and algorithmization of medical problems, the basics of modeling in medicine and pediatrics;
- formation of skills in the development of decision support systems in medicine and

pediatrics;

- familiarization with the possibilities of Web technologies and the basics of data protection.

Prerect and correct disciplines

Prerequisites. The study of the discipline "European standard of computer literacy" involves preliminary assimilation of credits in disciplines "Medical and biological physics",

Correct .. The main provisions of the discipline "European standard of computer literacy" should be used in the study of such disciplines as "Medical Informatics" and "Philosophy and Methodology of Science".

CONTENTS OF THE DISCIPLINE

Curriculum

Theme 1. Basic concepts of computer science.

Topic 2. Network technologies in professional activities. Network software. Basics of information security.

Topic 3. Internet Information Resources (Laboratory Work).

Theme 4. Medical information systems. Electronic medical cards of the patient.

Theme 5. Text editors for creating, editing text documents (laboratory work).

Theme 6. Database management system for organization, storage of data and access to it (laboratory work).

Theme 7. Instrumental software in mathematical modeling and biological statistics.

Topic 8. Data processing technologies in a tabular processor environment (laboratory work).

Theme 9. Programs for preparing presentations (laboratory work).

Theme 10. Final lesson. Passed