

PSYCHOLOGICAL AND PEDAGOGICAL FEATURES OF TEACHING MEDICAL AND BIOLOGICAL PHYSICS

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The article examines the peculiarities of teaching Medical and Biological Physics from the point of view of the students' attitude and perception of the educational course and the teaching methods used by teachers conducting classes.

The purpose of the article is to study the main psychological and pedagogical regularities of teaching Medical and Biological Physics taking into account the psychological portrait of a modern medical student. The objective of the study is to analyze the problem of optimizing the psychological and pedagogical component of the educational process in the studying of physical and mathematical courses by medical students.

Research methods used are pedagogical observation and conversations as a form of empirical research, as well as analysis of scientific psychological and pedagogical sources, own pedagogical experience and analysis of empirical data as a form of theoretical research

The teacher's task is to identify in time the special abilities of students and help them to determine their development vector in borders of a specific course, to master professional competences and see a whole picture of the field of knowledge. To understand the functioning of living systems, to explain cause-and-effect relationships, and processes that occur in biological tissues and living organisms in general, future doctors need a certain amount of knowledge which is based on physical laws, that is, knowledge of biological physics. Medical physics is an integral part of the complex of knowledge for the purpose of researching the state of the biological system, analyzing changes in its behavior under the influence of certain physical factors, and preventing their negative impact. This is quite a difficult task, since there is a significant decrease in the level of training in the field of natural sciences demonstrated by the applicants to medical higher educational institutions.

Educational activity is a defining function of the work of a teacher of a higher educational institution and should be organized in accordance with the requirements of society, highlighting modern trends in the development of the industry, with an emphasis on the achievements of the direction for the industry as a whole, to ensure the formation of the competencies of a specialist competitive on the labor market. The article substantiates the work methods of the teachers of the Department of Biological Physics and Medical Informatics of the Bukovinian State Medical University in organizing the educational process and conducting classes in Medical and Biological Physics.

All teacher's functions are inextricably linked, and the examples given in the article show that this is relevant for the course, which is often by mistake considered as an element of general training, where there is no professional orientation of medical education. The professionalism of a teacher of natural sciences lies precisely in their ability to combine the elements of the course and the professional component training in the student education. Here, the relationship between methodical knowledge and the teacher's skills, such as ways, methods, means, and techniques of working with students, are decisive. All this gives an opportunity to turn this course into a means of forming competencies and developing the student's potential. The article draws a conclusion on the prospects for the development of students' clinical thinking and the professionalization of medical education through the optimal organization of teaching courses related to natural sciences with Medical and Biological Physics taken as an example.

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