

## PASSPORT OF THE EDUCATIONAL PROGRAM

## • 6B01506 Physics-informatics

| THE PURPOSE OF THE EDUCATIONAL PROGRAM | Training of teachers in physics and informatics science with high social and civic responsibility, able to carry out professional activities in the following areas: education and formation of a fully developed personality of the student; formation of systematic knowledge in the field of physics and computer science; organization of the educational process in physics and computer science at the modern scientific and methodological level; organization of project activities. |
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| FIELD OF PROFESSIONAL ACTIVITY         | Educational: broadcasts educational information, teaches you to independently acquire knowledge; Educating: introduces students to the system of social values; Methodological: provides methodological support for the educational process; Research: studies the level of assimilation of the content of education by students, examines the educational environment; Social and communicative: interacts with the professional community and with all stakeholders in education.          |

## LEARNING OUTCOMES (LO)

**LO1**-is able to assess the surrounding reality on the basis of worldview positions formed by knowledge of the basics of philosophy and social and humanitarian sciences, analyzes the main stages and patterns of historical development for the formation of patriotism and citizenship;

**LO2**-uses oral and written communication in Kazakh, Russian and foreign languages to solve problems of interpersonal, intercultural and professional interaction;

**LO3**-has the basic methods, methods and means of obtaining, storing, processing information, has the skills to work with a computer as a means of information management, uses the skills of working with information from various sources in cognitive and professional activities;

**LO4**-is able to build and implement promising lines of intellectual, cultural, moral, physical and professional self-development and self-improvement;

**LO5**-provides training, education and development taking into account the social, age, psychophysical and individual characteristics of students, including those with special educational needs;

**LO6**-knows the methods of psychological and pedagogical support of the educational process in accordance with the legal acts in the field of education;

**LO7**-is aware of the social significance of his future profession, is motivated to carry out professional activities, has the basics of professional ethics and speech culture, is able to use basic theoretical knowledge to solve professional problems;

**LO8**-demonstrates a comprehensive understanding of the fundamental laws of physics, is able to use modern methods of processing, analyzing and synthesizing physical information, is capable of abstract thinking and scientific analysis, supplemented by mathematical, computational and experimental skills;

**LO9**-theoretically models and experimentally investigates physical phenomena, is able to understand and use in practice the theoretical foundations of the organization and planning of physical research;

**LO10**-is able to develop, implement and improve a plan for acquiring new knowledge and skills for specific professional purposes, work in a team, use the strengths of scientific communication, and critically assess the current state of knowledge and experience;

**LO11**-is able to apply basic professional skills in practice, knows the methods of forming the subject skills of schoolchildren, as well as the methods of forming an interest in physics and using knowledge in the field of physics in everyday life.