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| Educational program | 6В01512 Physics (IP) |
| EP purpose | The aim of the educational program is to train physics teachers with competencies in new fields that meet modern challenges in education and form competencies necessary for teachers of the 21st century who live and work in a world of variability, uncertainty, complexity, ambiguity |
| EP type | Innovative |
| Level on NQF | 6 |
| Level on SQF | 6 |
| The awarded academic degree | Bachelor |
| Period of study | 4 |
| Volume of the credits | 240 |
| Language of education | Kazakh, Russian |
| Date of approval of the OP at the Board meeting | 10.04.2024 |
| Professional standard | Pedagog 15.12.2022 |

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| № | Learning outcomes: |

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| 1 | possess intercultural and communicative competence, apply skills of independent continuation of further education and build professional relationships in pedagogical and social activities; purposefully use means and methods that ensure the preservation and strengthening of health in professional activities |
| 2 | to collect and interpret information for the formation of knowledge taking into account social, ethical and scientific considerations, critically evaluate their values, attitudes, ethical principles and teaching methods, set new goals for their own pedagogical development; |
| 3 | critically select theoretical knowledge based on advanced concepts of physics with the help of various information and communication technologies and use the knowledge to improve physics education and their own professional growth; |
| 4 | understand the psychological and pedagogical problems of teaching and educating students with disabilities in inclusive education, take into account the diverse abilities of students in the learning process, ethically support their psychological well-being in the life and educational context; |
| 5 | to recognize and understand fundamental scientific concepts that have fundamental methodological and theoretical significance for understanding and mastering the physical sciences, to argue their own position of applying and integrating knowledge from other fields of sciences to solve global and local problems of physics; |
| 6 | to cover holistically and objectively the main stages of the history, evolution of the forms of statehood and civilization of the Kazakh people, to know the methods of scientific research and academic writing, to understand the importance of the principles and culture of academic honesty; |
| 7 | demonstrate strong academic and practical knowledge in the field of physics, operate with forms and methods of scientific knowledge, various ways of mastering the surrounding world, understand the role of science in the development of society; |
| 8 | to conduct scientific research in the chosen field of experimental and (or) theoretical physical research with the help of modern instrumentation and information technology, taking into account domestic and foreign experience; |
| 9 | apply modern methods of processing, analysis and synthesis of physical information in their chosen field of physical research, operate with basic mathematical concepts and operations and are able to apply them in solving physical problems, implement analytical and technological solutions in the field of experimental and theoretical physics; |
| 10 | conduct integrated lessons with STEAM-learning elements, use CLIL technologies for subject-language teaching of natural subjects; |
| 11 | work in interdisciplinary teams, have the skills to apply scientific knowledge in solving social problems; |
| 12 | understand the scientific principles and logic of developing a school physics course, apply various learning technologies in their diversity and to the place. |