

**The name of the academic discipline:
«Integrated course of school physics»**

Code and name of specialty	6-05-0113-04 Physical and Mathematical Education (physics and informatics)
Training course	1
Semester of training	1
Number of class hours:	100
Lectures	-
Seminar classes	-
Practical classes	100
Laboratory classes	-
Form of current assessment (credit/differential credit/exam)	credit
Number of credits	4
Competencies to be formed	Mastering the discipline "Integrated course of school physics" should ensure the formation of basic professional competencies: apply the methodology for the formation of physical concepts and learning to solve physical problems, conduct a workshop, a physical experiment in the educational process at the level of general secondary education, use the basic laws of mechanics to solve experimental, calculated and research tasks considered at the basic and specialized levels of teaching physics in institutions that provide general secondary education; specialized competence: apply techniques and methods for solving problems to complete the tasks of schools
<p>Summary of the academic discipline:</p> <p>The discipline "Integrated course of school physics" includes the following sections: introduction, basics of kinematics, basics of dynamics, work and energy, basics of statics, mechanical vibrations and waves, basics of molecular-kinetic theory, basics of thermodynamics, basics of electrostatics, direct electric current, electromagnetism, electromagnetic vibrations and waves, wave and geometric optics, quantum optics, atomic physics, atomic nucleus physics and elementary particles.</p>	