

Academic discipline:
«Fundamentals of higher mathematics and probability theory»

Code and name of specialty	1-23 01 15 Social Communications
Training course	1
Semester of training	2
Number of class hours:	58
Lectures	24
Seminar classes	34
Practical classes	-
Laboratory classes	-
Form of current assessment (credit/differential credit/exam)	credit
Number of credits	3
Competencies to be formed	Studying the academic discipline « Fundamentals of higher mathematics and probability theory » is to ensure the formation of specialized competencies: to apply mathematical methods of calculations and statistical tools for the quantitative assessment of social phenomena.

Brief content of the academic discipline:

«**Fundamentals of higher mathematics and probability theory**» – it is an academic discipline that teaches students basic mathematical concepts and methods, develops the ability to formulate a problem using mathematical language, analyse data using quantitative methods, as well as explain the nature of mathematical abstractions and the possibilities of their use in the social and humanitarian sphere. The content of the discipline includes work in the following areas: the study of methods for constructing and solving mathematical models using various principles of idealization; familiarization with the basic set theory; mastering matrix calculus for solving problems used in professional activities; the formation of skills for applying elements of probability theory in educational, professional and socio-personal spheres; the development of interdisciplinary knowledge related to the use of mathematical and statistical methods in professional activities; stimulating students' cognitive interest in the application of mathematical and statistical methods in the social and humanitarian sphere.