

# PROBABILITY THEORY

## COURSE SYLLABUS ABSTRACT

### of higher education institution specialty

**Specialty's** 6-05-0311-02 Economics and management at the enterprise, 6-05-0411-02 Finance and credit

	STUDY MODE			
	full-time		part-time	part-time
	Economics	Finance	(shortened program)	
Year	2	2	2	2
Semester	3	3	3	3
Lectures, hours	16	16	4	4
Practical classes, hours	16	16	4	4
In-class control work, hours	-	-	-	2
Contact hours	32	32	8	10
Экзамен, semester	-	3	-	-
Pass/fail, semester	3	-	3	3
Independent study, hours	76	76	100	98
Total course duration in hours / credit units	108/3			

1. Course outline: basic concepts and theorems of probability theory, scheme of repeated independent tests, random variables and their basic distribution laws, law of large numbers and limit theorems, multivariate random variables, basics of mathematical statistics, statistical estimation, testing of statistical hypotheses, basics of analysis of variance, correlation and regression analysis.

2. Course learning outcomes. Upon completion of the course, students will be expected to:

**know:** basic concepts and theorems of probability theory; distribution laws of random variables; methods of processing and analysis of statistical data;

**be able:** apply probabilistic and statistical methods to solve economic problems;

**have the skill:** solve mathematical and economic problems using methods of probability theory and mathematical statistics.

3. Competencies

Names of competencies to be formed
6-05-0311-02 Use basic mathematical concepts and calculation methods for the analysis and modeling of economic processes
6-05-0411-02 Use basic mathematical concepts and calculation methods for the analysis and modeling of economic processes

4. Requirements and forms of midcourse evaluation and summative assessment

№	Type of valuation funds	Number of sets
1	Test for the credit (electronic test)	1
2	Control work (electronic test)	2
3	In-class control work (electronic test)	1
4	Knowledge Assessment Test	8