



Syllabus of the course
«Probability Theory and Mathematical Statistics»

Specialty	073 Management
Study Programme	Business Administration
Study cycle (Bachelor, Master, PhD)	the first (bachelor) level of higher education
Course status	Mandatory
Language	English
Term	first year, second semester
ECTS credits	5
Workload	Lectures – 16 hours. Practical studies – 16 hours. Laboratory studies – 16 hours. Self-study – 102 hours.
Assessment system	Grading including Exam
Department	Department of higher mathematics, economical and mathematical methods, room 329 (main building), phone number (057) 7020405 (or 3-33), department site: http://www.vm.hneu.edu.ua/
Teaching staff	Misiura Ievgeniia Iuriivna, PhD in technics, associate professor
Contacts	Misiura Ie. Iu.: Ievgeniia.Misiura@hneu.net
Course schedule	Lectures: according to the schedule Practical studies: according to the schedule Laboratory studies: according to the schedule
Consultations	At the Department of higher mathematics, economical and mathematical methods, offline, according to the schedule, individual, PNS chat.
The purpose of the course is forming future specialists' mathematical knowledge for solving theoretical and practical economic problems in any sphere of a professional activity	
Prerequisites for learning Higher Mathematics, Informatics	
Course content	
Content module 1 Probability Theory Theme 1. Empirical and logical foundations of probability theory. Basic theorems of probability theory, their economic interpretation. Theme 2. Scheme of independent tests. Theme 3. Distribution laws and numerical characteristics of a discrete random variable. Theme 4. Distribution laws and numerical characteristics of a continuous random variable. Content module 2 Mathematical Statistics Theme 5. Primary processing of statistical data. Statistical estimations of parameters of a distribution. Theme 6. Testing statistical hypotheses. Theme 7. Elements of correlation theory. Elements of regression theory. Theme 8. Elements of variance analysis.	
Teaching environment (software) <i>Multimedia projector, S. Kuznets PNS, Corporate Zoom system</i>	



Assessment system

Assessment of students' learning outcomes is carried out by the University according to the cumulative 100-point system.

Current control is carried out during lectures, practical and laboratory classes and aims to assess the level of students' readiness to perform particular tasks, and is assessed by the amount of scored points.

The maximum amount during the semester – 60 points; the minimum amount required is 35 points. Final control is carried out at the end of the semester in the form of an exam (the maximum amount is 40 points, the minimum amount required is 25 points).

Current control includes the following assessment methods: colloquiums; written tests; homework; laboratory works; independent creative task.

More detailed information on assessment and grading system is given in the technological card of the course.

Course policies

Teaching of the course is based on the principles of academic integrity.

Violation of academic integrity includes academic plagiarism, fabrication, falsification, cheating, deception, bribery, and biased assessment.

Students may be brought to the following academic responsibility for breach of academic integrity: repeated assessment of the corresponding type of learning activity.

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, self-study is given in the Program of the course.

Syllabus approved at the meeting of the Department 15/03/2023, minutes №10.