Syllabus of the educational discipline
«*Probability Theory and Mathematical Statistics*»

Specialty	*073 Management*
Educational program	*Logistics*
Level of education	*First (bachelor) level of higher education*
Discipline status	*Mandatory*
Teaching language	*English*
Course / semester	*1st course,2nd semester*
Number of ECTS credits	*5*
Distribution by types of trainings and hours of study	*Lectures – 16 hours.* *Practical studies – 16 hours.* *Laboratory studies – 16 hours.* *Independent training – 102 hours.*
Form of final assessment	*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/*
Teacher (-s)	*Misiura Ievgeniia Iuriivna, PhD in technics, associate professor*
Teacher's contacts	*Misiura Ie. Iu.: Ievgeniia.Misiura@hneu.net*
Days of classes	*Lectures: according to the schedule* *Practical studies: according to the schedule* *Laboratory studies: according to the schedule* *http://rozklad.hneu.edu.ua/schedule/schedule?employee=422744*
Consultations	*in room of department of higher mathematics, economical and mathematical methods, full-time, according to the schedule of consultations, individual*

The purpose of the discipline is forming future specialists' mathematical knowledge for solving theoretical and practical economic problems in any sphere of a professional activity

Prerequisites for learning

List of previously learned disciplines: Higher Mathematics

Content of the educational discipline

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. Limited theorems of probability theory. Primary processing of statistical data. Statistical estimations of parameters of a distribution.

Theme 6. Testing statistical hypotheses

Theme 7. Elements of variance analysis

Theme 8. Elements of correlation theory. Elements of regression theory

Material and technical support (software) of the discipline

device: multimedia projector; software: MS Excel

Course page on the Moodle platform (personal training system)	*https://pns.hneu.edu.ua/*

Assessment system of learning outcomes

The system of assessment of competences which were formulated for a student during the learning of the academic discipline, takes into consideration the forms of studies which according to

the syllabus of the academic discipline is carried out on the accumulative 100-point system.

Current control is carried out within a term during lectures, practical studies and laboratory works in the following forms: homework; defence of laboratory works; written tests; an independent creative work and colloquiums. It is assessed as a sum of accumulative points (the maximum equals 60 points; the minimum which makes it possible for a student to pass an exam, equals 35 points).

Final control is conducted in the form of an exam according to the schedule of the educational process (the maximum is 40 points, the minimum of a quantity, which is passed, equals 25 points).

The final mark of the academic discipline is calculated according to the points obtained during the exam and points obtained during the current control on the accumulative system.

More detailed information on an assessment is given in the working plan (technological card) of the discipline.

Discipline policies

Teaching discipline is based on the principles of academic integrity. Violations of academic integrity are academic plagiarism, self-plagiarism, fabrication, falsification, write-off, deception, bribery, biased evaluation. For violation of academic integrity, students may be held subject to the following academic liability: re-passing the corresponding educational component of the educational program

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, independent training is given in the Syllabus (working plan) of the educational discipline

Syllabus approved at the meeting of the Department "June 29", 2022. Protocol №11