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

Specialty	*073 Management*
Educational program	*Logistics*
Level of education	*first (bachelor)*
Discipline status	*Compulsory discipline*
Teaching language	*English*
Course / semester	*1 st course,2nd semester*
Number of credits ECTS	*5*
Distribution by types of trainings and hours of study	*Lectures – 24 hours.*
	Practical studies (seminars) – 12 hours
	Laboratory studies – 12 hours
	Independent training – 102 hours
Form of final assessment	*Exam*
Department	*Department of higher mathematics, economical and mathematical methods, Simon Kuznets KNUE, room 329 (main building), +38(057)702-04-05 (or 3-33),* E-mail: kafmath@hneu.edu.ua, http://www.vm.hneu.edu.ua/
Teacher (-s)	*Lebedev Stepan Sergovych, Senior Lecturer*
Teacher's contacts	Stepan.Lebedev@hneu.net
Days of the classes	*According to the schedule*
Consultations	*Distance, according to the schedule*

The purpose of the discipline

is forming future specialists' basic mathematical knowledge for solving theoretical and practical problems in professional activity of a competent specialist in any sphere of his activity, skills in analytical thinking and skills in using mathematical knowledge for formation of real processes and developments, and for solving economic problems..

Prerequisites for learning
Assimilation of the material of the discipline "Higher Mathematics"

Content of the educational discipline
Content module 1. Probability Theory
Theme 1. *Empirical and logical foundations of probability theory.*
Theme 2. *Basic theorems of probability theory, their economic interpretation.*
Theme 3. *Scheme of independent tests.*
Theme 4. *Distribution laws and numerical characteristics of a discrete random variable.*
Theme 5. *Distribution laws and numerical characteristics of a continuous random variable.*
Theme 6. *Multidimensional random variables*
Content module 2. Mathematical Statistics
Theme 7. *Limited theorems of probability theory. Primary processing of statistical data*
Theme 8. *Statistical estimations of parameters of a distribution.*
Theme 9. *Testing statistical hypotheses*
Theme 10. *Elements of correlation theory.*
Theme 11. *Elements of analysis of variance*
Theme 12. *Elements of regression theory*

Material and technical support (software) of the discipline
Software MS Excel

Course page on the Moodle platform (personal training system)	*Syllabus (working program), working plan (technological card), recommended literature, journal of students' attendance, materials of lectures (notes and presentations), questions to independent work, guidelines to conducting practical and laboratory studies, tasks for independent work, tests for checking students' knowledge, example of an examination paper and a criteria of an assessment of examination work* https://pns.hneu.edu.ua/course/view.php?id=4886

Assessment system of learning outcomes

Current control is carried out on a cumulative 100-point system (the maximum is 60 points; the minimum that allows a student to take the exam is 35); final control is conducted in the form of an exam according to the schedule of the educational process (maximum is 40 points, minimum is 25 points).

More detailed information on assessment is given in the technological card of the discipline

Accumulation of rating points in the discipline

Types of training	**Max points**
Homework	**12**
Laboratory works	**12**
Written tests	**12**
Independent creative task	**8**
Colloquiums	**16**
Exam	**40**
Max points	**100**

Discipline policies

Policy of academic integrity (according to the Law of Ukraine "On Education") - "Teaching discipline is based on the principles of academic integrity - a set of ethical principles and statutory rules that should guide participants in the educational process during training, teaching and conducting scientific (creative) activities to ensure confidence in learning outcomes and / or scientific (creative) achievements. 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-assessment (test, exam, test, etc.); re-passing the relevant educational component of the educational program. Write-off during control (modular) works is forbidden (including with use of mobile devices). https://www.hneu.edu.ua/akademichna-dobrochesnist/

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", 2021. Protocol №12