Syllabus of the course
«*Higher Mathematics*»

Specialty	*073 Management*
Study Programme	*Logistics*
Study cycle (Bachelor, Master, PhD)	*the first (Bachelor) level of higher education*
Course status	*Mandatory*
Language	*English*
Term	*1 year, 1 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, Economic and Mathematic Methods, auditorium 329 of the main building* *phone: (057)702-04-05 (add. 3-33)* *website: http://www.vm.hneu.edu.ua/*
Teaching staff	*Ievgeniia Iuriivna Misiura, PhD in Technics, Associate professor*
Contacts	*Ie. Iu. Misiura 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, Economic and Mathematic Methods, offline, according to the schedule, individual, PNS chat.*

Learning objectives and skills:

form future specialists‘ mathematical knowledge for solving theoretical and practical economic problems in any sphere of a professional activity, master skills in analytical thinking and skills in using mathematical knowledge for formation of real processes and developments and for solving economic problems

Structural and logical scheme of the course

Prerequisites	Postrequisites
School course of mathematics (geometry, algebra and precalculus)	Probability theory and mathematical statistics
	Economy of enterprise
	Econometrics

Course content

Module 1: *Linear algebra and analytical geometry*

Topic 1. The elements of the theory of matrices and determinants

Topic 2. The general theory of the system of linear algebraic equations

Topic 3. The elements of vector algebra. Elements of analytical geometry

Module 2: *The elements of mathematical analysis*

Topic 4. The limit of a function and continuity. Differential calculus of the function of one variable

Topic 5. Analysis of the function of several variables

Topic 6. Integral calculus

Topic 7. Differential equations

Topic 8. Series

Teaching environment (software)

Multimedia projector, S. Kuznets PNS, Corporate Zoom system, software: MatLab, Octave

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 and practical (seminar) 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: homework; defence of laboratory works; a written test; an independent creative work, a colloquium.

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

Course policies

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

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

Education seekers 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 Course program