Syllabus of the course
«*High Mathematics*»

Specialty	073 Management
Study programme	Business-administration
Level of education	first (bachelor)
Discipline status	*Mandatory*
Teaching language	*English*
Course / semester	*1st course, 1st semester*
Number of credits ECTS	*5*
Distribution by types of trainings and hours of study	*Lectures – 16 hours.*
	Practical studies (seminars) – 16 hours.
	Laboratory studies – 16 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)	Misiura Ievgeniia Iuriivna, PhD, associate professor
Teacher's contacts	*misuraeu@gmail.com*
Days of the classes	*according to the schedule*
Consultations	*Distance, according to the schedule*

The purpose of the course 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; an ability to abstract thinking, analysis, synthesis; an ability to apply knowledge in practical situations; skills in the use of information and communication technologies; an ability to plan the activities of the organization and manage time; 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 school disciplines "Algebra" and "Geometry"

Content of the course

Content module 1. Linear algebra and analytical geometry

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

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

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

Content module 2. The elements of mathematical analysis

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

Theme 5. Analysis of the function of several variables

Theme 6. Integral calculus

Theme 7. Differential equations

Theme 8. Series

Material and technical support (software) of the course

Software *MatLab, Octave*

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=3612

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 *(example)*

Types of training	**Max points**
Homework	**7**
Laboratory works	**16**
Written tests	**16**
Independent creative task	**7**
Colloquiums	**14**
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).

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

Syllabus approved at the meeting of the Department "June 29", 2021. Protocol №12