



Syllabus of the educational discipline «Quantitative Methods»

Specialty	<i>D.3 Management</i>
Educational program	<i>D.3.170 International Business</i>
Level of education	<i>First (bachelor)</i>
Discipline status	<i>Obligatory</i>
Teaching language	<i>English</i>
Course / semester	<i>1 course, first semesters</i>
Number of credits ECTS	<i>4</i>
Distribution by types of trainings and hours of study	<i>Lectures – 20 hours Practical studies (seminars) – 10 hours. Laboratory studies – 10 hours Independent training – 80 hours.</i>
Form of final assessment	<i>Exam</i>
Department	<i>Department of Economics and Mathematical Methods, S. Kuznets Kharkov National University of Economics, main building, rooms 329,330. Phone +38(057)702-04-05 (additional 3-33), http://www.vm.hneu.edu.ua/</i>
Teacher (-s)	<i>Lebedev Stepan Sergovich, senior lecturer</i>
Teacher's contacts	<i>stepan.lebedev@hneu.net, +380 93 352 3220</i>
Days of the classes	<i>According to the student's schedule</i>
Consultations	<i>According to the consultations schedule, individual consultations are available on the website of the personal learning system.</i>

The purpose of the discipline is

forming of future specialists of basic mathematical knowledge for solving theoretical and practical problems of the professional activity of a competent specialist in the field of international business, analytical thinking skills and the skills of using mathematical knowledge for research and forecasting real processes and events, as well as for solving economic problems.

Prerequisites for learning

High School Mathematics Course

Content of the educational discipline

Content module 1 *Linear algebra, analytic 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. *Elements of vector algebra.*

Theme 4. *Elements of analytical geometry.*

Content module 2 *Elements of mathematical analysis*

Theme 5. *Limits of functions and continuity.*

Theme 6. *Differential calculus of functions of one variable.*

Theme 7. *Analysis of functions of many variables.*

Theme 8. *Indefinite integral.*

Theme 9. *Definite integral and its applications.*

Theme 10. *Differential equations.*



Material and technical support (software) of the discipline

MatLab (Octave), Excel

Course page on the Moodle platform (Personal Learning System) <https://pns.hneu.edu.ua/course/view.php?id=12981>

Assessment system of learning outcomes

The system for evaluating the developed competencies takes into account the types of classes that involve lectures, practical and laboratory classes, as well as independent work. Assessment of students' developed competencies is carried out according to a cumulative 100-point system. Current control carried out during semester (during lectures, seminars and laboratory works) and evaluated by the amount of points (max - 60 points, min - 35 points). A minimum amount is 35 points that allows a student to take an exam. Final control is carried out in the form of exam and evaluated in points (max - 40 points, min - 25 points)

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

Discipline policies

Policy of academic integrity according to the Law of Ukraine "About Education" tells that teaching discipline should be based on the principles of academic integrity, they are a set of ethical principles and statutory rules that should guide participants in the educational process during training, teaching, conducting scientific (creative) activities to ensure confidence in learning outcomes and 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: reassessment (test, exam, etc.); re-passing of the relevant educational component of the educational program. Rewriting during control is prohibited (including with using electronic devises) <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 "Higher Mathematic in the International Economic Relations"