



Syllabus of the course «Quantitative Methods»

Specialty	<i>C1 Economics and International Economic Relations (specialising in International Economic Relations)</i>
Study Programme	<i>International Economic Relations</i>
Study cycle (Bachelor, Master, PhD)	<i>the first (Bachelor) level of higher education)</i>
Course status	<i>mandatory</i>
Language	<i>English</i>
Term	<i>1 year, 1 semester</i>
ECTS credits	<i>4</i>
Workload	<i>Lectures – 20 hours</i> <i>Practical studies – 10 hours.</i> <i>Laboratory studies – 10 hours</i> <i>Self-study – 80 hours.</i>
Assessment system	<i>Grading including 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>
Teaching staff	<i>Lebedev Stepan Sergovich, senior lecturer</i>
Contacts	<i>stepan.lebedev@hneu.net, +380 93 352 3220</i>
Course schedule	<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>

Learning objectives and skills:

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.

Structural and logical scheme of the course

Prerequisites	Postrequisites
	Business Economics
	Digital Technologies in International Economic Relations

Course content



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.*

Teaching environment (software)

Multimedia projector, S. Kuznets PNS, Corporate Zoom system

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: assignments on a particular topic; testing; presentations, and essay writing.

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.

Educational students 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