Simon Kuznets Kharkiv National University of Economics

Syllabus of the course

«Economic and mathematical models in international business»

Specialty	*292 «International Economic Relations»*
Study Programme	*International Bysiness*
Study cycle (Bachelor, Master, PhD)	*the first (Bachelor) level of higher education*
Course status	*elective*
Language	*English*
Term	*third year fifth semester or third year sixth semester or fourth year seventh semester*
ECTS credits	*5*
Workload	*Lectures – 12 hours.*
	Practical studies – 18 hours.
	Laboratory studies – 18 hours.
	Self-study – 102 hours.
Assessment system	*Grading including Exam*
Department	*Department of higher mathematics and economic-mathematical methods, aud. 329 (main building), tel. (057)702-04-05, website of the department: http://www.vm.hneu.edu.ua/*
Teaching staff	*Malyarets Lyudmila Mykhaylivna, doctor of science, professor,* *Martynova Olena Vadimovna, PhD, associate professor*
Contacts	*malyarets@ukr.net* *elenkavl21@gmail.com*
Course schedule	*Lectures: according to the schedule* *Practical studies: according to the schedule*
Consultations	*At the Department of higher mathematics and economic-mathematical methods, offline, according to the schedule, individual, PNS chat.*

Learning objectives and skills:

of the educational discipline is to form the acquirers of competences in the theory and practice of applying mathematical optimization methods and methods and also models of econometrics for solving typical problems in the field of international economic relations, as well as the implementation of these methods on a computer

Structural and logical scheme of the course

Prerequisites	Postrequsites
-	-
-	-

Course content

Content module 1. *Optimization methods in international business*

Theme 1. Mathematical methods and models in international business. Linear programming problem

Topic 2. Graphical and simplex methods of solving LPP

Topic 3. Theory of duali

Topic 4. Elements of game theory. Analysis of risks in international busines

Content module 2. *Econometric methods in international business*

Topic 5. Peculiarities of econometric models in international business and principles of their construction

Topic 6. Paired regression and correlation in international markets and testing the quality of the paired regression equation
Topic 7. Linear models of multiple regression and reliability assessment of its results
Topic 8. Modeling of one-dimensional time series
Topic 9. Time series trend modeling. Forecasting in international busines
Topic 10. Integral indicators on international markets

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: colloquiums; written tests ; homework; laboratory work; an independent creative task.

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.